

**THE PRINCIPLES OF  
CONTRACEPTION**

# THE PRINCIPLES OF CONTRACEPTION

A HANDBOOK FOR GENERAL  
PRACTITIONERS

by

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## FOREWORD

THERE IS AT PRESENT no perfect method of contraception; the subject possesses difficulties, both of physiology and individual peculiarity.

Most authorities agree on the major issues as to what methods are advisable or inadvisable. Yet their small practical details vary so much that elaboration here would be merely confusing.

Having considerable experience of contraceptive work, both in birth control clinics and in general practice, I propose, where authorities differ, to offer my own technique, believing it to be fairly representative.

The first part of this book is a survey of popular methods for the guidance of general practitioners. The second part will be of use to those who intend making a particular study of contraceptive work.

I have deliberately omitted or dealt briefly

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with such matters as the chemistry of contraceptives, which have a more appropriate place in scientific papers and laboratory manuals. Nor have I dealt at any length with contraceptive methods which are still under investigation, such as the use of spermatoxins, X-rays, etc. This is strictly a clinical manual, a work on methods that have proved useful in general practice, and that any practitioner can learn easily, and can equally easily teach to patients.

Readers who wish to study the aspects of contraception which I have omitted have several excellent authorities to which they can refer : for a wide survey of the subject, *Control of Conception*, Dickinson and Bryant (Baillière, Tindall & Cox), and *Parenthood : Design or Accident*, Michael Fielding (Williams & Norgate); for practical detail, *The Reports of the International Medical Group for the Investigation of Contraception*; and for theoretical detail, the papers of Dr. John Baker, published in the *Journal of Hygiene*, and *Chemistry and Physics of Contraception*, C. I. B. Voge (Cape).

Since the British Pharmacopœia contains no spermicidal substances as such, reference must

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be limited to proprietary preparations. The most satisfactory of these will be mentioned in the appendix, with prices and address of maker. In all probability these preparations will be superseded, and a more up-to-date list can be obtained by application to the National Birth Control Association, 26 Eccleston Street, S.W.1.

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PART I

## CHAPTER I

# THE SCOPE OF CONTRACEPTION IN GENERAL PRACTICE

A GENERAL PRACTITIONER can no longer afford to be ignorant about birth control. For social and economic reasons the practice is becoming widespread, and there can be no class of general practice where the married women are not individually concerned with this problem.

Apart from the social aspect, the science of contraception has suddenly come into importance for purely medical reasons. The recent understanding of anxiety-neurosis has thrown a flood of light on to types of functional ill-health which make up much of the work of a general practitioner. Among the factors which cause this condition must be considered the sexual (and therefore the contraceptive) adjustments of the patient.

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Recently a group of undergraduates attended a birth control clinic for instruction. On being asked if it was desirable to trouble with such work before qualification, one replied that he had recently ploughed in "Conjoint" because he had had two obscure cases of anxiety-neurosis in his practical exam. He added, succinctly, that given a psycho-neurotic temperament (of which there are legion), he understood that the use of unsatisfactory methods of contraception frequently acted as the "last straw"—the precipitating factor of the condition.

Thus it comes about that the younger generation is coming into general practice equipped with knowledge which senior practitioners have had little opportunity to acquire; and since these matters are also becoming understood by the intelligent public, it is hoped that a few words about the subject of "anxiety" conditions will be valuable.

The fact that physical symptoms can be caused by emotion in quite average people is well within the knowledge of everyone. How many students before examinations have not

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suffered from functional disturbances? Frequency of micturition, palpitation, and diarrhoea are of everyday occurrence. Equally common is the unfortunate person who spends not hours but years troubled by such psychogenic symptoms. In these cases, however, the cause for anxiety is less manifest ; usually it has become forgotten or " repressed," although the anxiety persists actively in the personality of the patient. Medical psychology has shown that all people have much of this unconscious " morbid " anxiety in their make-up, but the majority compensate well enough unless faced with a stress which is too great for them individually. When this occurs, there come symptoms of " nervous breakdown," either in the form of depression, excessive worrying, or physical functional disturbance. Perhaps the most frequent of these are disturbances of the digestive tract, of cardiac action, of micturition ; lassitude, asthma, neuralgias and, in women, disturbances of menstrual function are common.

Most of the physical manifestations of neurosis are produced by disturbances of the

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autonomic nervous system. Although such symptoms can and must receive appropriate treatment, it can be said that, where the physician has in the past administered bromides, in the present he seeks also to find a precipitating cause for the condition.

Now it is found in very many "anxiety-cases" that there is one common factor—an interference with the satisfactory completion of the sexual act.

This interference may come from intrinsic causes (some degree of psychical impotence or frigidity is extremely common) or from extrinsic causes, such as incompetence in the married partner, or *from the use of ill-chosen methods of contraception.*

Although medical psychologists can often give help in the former difficulties, the way is open for the general practitioner to effect the most dramatic "cure" if he can tackle the latter problem. In such cases, if enquiry is made and advice proffered, the relief to the patient may be incalculable.

It is not uncommon to hear practitioners say that there is no demand for contraception:

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in their practice, that they seldom or never get asked for such advice.

In these matters the relationship of the medical profession to the public is very unsatisfactory. Most women have the firm conviction that their family doctor will be unsympathetic to birth control and hence they will seldom ask his advice and risk a rebuff. They prefer to trust to the gossip of other women, which is usually confused with the idea that early abortion by drugs is easy and proper, and that "if you take the matter in hand early enough" a period can be brought on in any case!

It must be admitted that there is much justification for people who get their knowledge outside medical circles, because even when they are not rebuffed the advice given is often extremely misleading. How frequently one hears the protest: "But, Doctor, I cannot be pregnant, for another doctor told me this method was infallible." "This method" being usually the use of some soluble pessary which is advertised in the lay or medical Press.

It is not to the good of the public or the

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profession for matters to remain in this position. While it is not necessary that every general practitioner should be expert in the fitting of occlusive caps, it is very desirable that he should have a clear idea of the relative safety of different contraceptive methods and he should know better than to tell a patient that any method is infallible; unfortunately absolute safety is impossible to achieve and should a conception inadvertently occur, a mistake of this sort can hardly be explained away.

It is also believed that if a general practitioner is known to be favourable to birth control, his reputation may suffer. More probably, the result is quite the reverse.

The proportion of women who are unconcerned about the chance of pregnancy must be very small; either another baby is hoped for, or else its coming is definitely not desired, or even dreaded. How is it possible that a practitioner who is helpful in these matters will not receive gratitude? It is true there is still some general prejudice, as well as opposition in Catholic circles; but if advice on contraception is given to patients by their

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doctor, they are not likely to publish the matter widely, or to prejudiced listeners. More likely they will send to the adviser others of their friends who are in need of similar help.

On account of the reticence between the medical profession and the public, it is frequently necessary for the physician to broach the subject himself, and this can be done quite easily without risk of getting into difficulties with a prejudiced patient.

If the patient's history and condition suggest a factor of anxiety-neurosis, it is not difficult to discover the contraceptive habits by asking how many children, or pregnancies, she has had. On her reply, one can say : " And is that enough for you, or do you want a larger family ? " If she says " No," she usually does so with emphasis. Then it is easy for the physician to ask : " And do you know what to do to protect yourself ? " Immediately the whole question is opened and the woman is only too glad to say she is trusting to such and such a method, but she is not certain as to its advisability, its risk, and so on.



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Then it may be possible to explain to the patient that although a method such as "being careful" (coitus interruptus) may have given her protection for some while, it is very far from safe ; that it is a great nervous strain on her husband as well as on herself, and that medical people are regularly advising against this practice. Once the confidence of the patient is gained it is not difficult to ask her whether or not she is getting her own satisfaction with this method, and to explain that if she is capable of getting a "climax" it is necessary for her health that she should do so. The patient will quite frequently reply that she never gets any satisfaction at all, as she has been "holding back," believing that this was an additional safeguard ; she adds that she is no longer interested in such things. It may be possible to point out how many of her symptoms have appeared since the beginning of this practice, and to ask whether her husband also shows signs of nervous strain.

Although many patients will make light of the importance of sexual matters to themselves, under the impression that it is more becoming

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that they should do so, if they see that the physician is serious in his approach to the subject they will easily relax this caution and be only too grateful to give their full confidence. The practitioner who has thus established himself in the confidence of his patient will give a very real service to her and often, indirectly, to the other members of her family.

It is a curious fact that so many obstetricians ignore the importance of contraceptive instructions. In private practice such disregard may cause little more than inconvenience to the patient, for she can usually seek advice elsewhere ; but in hospital practice, to withhold contraceptive advice may lead even to tragic consequences.

No one who has sat through a few sessions at a contraceptive clinic can fail to be appalled at some of the results of hospital advice. " The doctor told my husband that if I get pregnant again I shall lose my life—but he never told us what to do." This statement is not rare, it is a commonplace ; and patients are continually being discharged even from leading London hospitals with warnings of this sort.

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Every hospital authority, whether doctor or nurse, who treats a patient in this way is throwing a tremendous burden upon the wife and husband. The woman may return to her home and attempt a lifelong abstention from sexual intercourse. More often she simply postpones marital relations until she dare no longer withhold herself for fear her husband should be unfaithful. Sexual intercourse in such circumstances, whether it is followed by pregnancy or not, must inevitably arouse the woman's resentment, and the man's anxiety and remorse.

There is a further point which is concerned with a wider dissemination of contraceptive knowledge.

The prevalence of illegal abortion is undoubtedly enormous, and figures published from time to time have suggested that the mortality and morbidity from this practice must be very much higher than is commonly recognised.

It is clear that no amount of coercive influence will stop a woman, if she is really desperate, from attempting abortion. The

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only medical help which can be given to such women is purely prophylactic.

An easier attitude of the medical profession towards contraception will go far to overcome ignorance and prejudice. Public authorities are slow in putting to full use the increased facilities offered by the Ministry of Health for the provision of local birth control clinics. These advances are only a matter of time, but it is a pressing matter as far as maternal health is concerned.

Until contraceptive service is available for all working-class women, the family practitioner should feel his responsibility in this matter, and should be able to advise a woman concerning the safety of any method which she is using, or be prepared to refer her to the nearest suitable clinic if that is necessary.

Finally, the practitioner who has knowledge of these important aspects of family life will find what a vast amount of unhappiness is caused by ignorance and sexual maladjustment. It is surprising how frequently help can be given by a little sympathetic and practical advice.

## CHAPTER II

# PRINCIPLES OF CONTRACEPTION

**C**ONTRACEPTION is concerned with preventing the spermatozoa from meeting the unfertilised ovum. This presents a very difficult problem: the average ejaculate of semen contains two to three hundred million spermatozoa, each small and intensely active, and each competing to make its way up the female generative tract towards the ovum.

The ejaculate of semen varies from 4 to 5 cc. in bulk, of which the spermatozoa themselves make up a very small proportion, most of the fluid being protective alkaline secretions from the prostate and seminal vesicles. Each sperm is about 0.05 millimetres in length and can swim 3.5 millimetres ( $\frac{1}{7}$  of an inch) in a minute. The not infrequent occurrence of pregnancy in women with an intact

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hymen is proof of the great activity of the spermatozoa.

The acidity of the vagina is considerably greater than that of the semen, and it is believed that after several hours' wait in the vaginal passage all spermatozoa are practically immobilised. Unfortunately it is impossible to say precisely how long a stay in the vagina is necessary to render the sperms inactive. The pH of the vagina averages 3.86, but it varies widely in different women and in the same woman from day to day. The vagina is known to be less acid during and after menstruation. It is probable that no sperm would be active enough to effect conception if it had been in the vagina longer than about eight hours.

The secretion in the cervical canal, uterus and fallopian tubes is more alkaline than vaginal secretion. It is held, though in the human subject it is not proved, that the spermatozoa may remain active here for many hours or even days. Their meeting-place with the ovum is usually in the ampullary end of the fallopian tube, so that maturation is well

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advanced by the time the fertilised ovum descends and becomes embedded in the uterine mucosa.

Human ingenuity has devised many methods of circumventing the meeting of the spermatozoa with the ovum ; these can be grouped roughly into several types :

It may be arranged that the semen is never deposited within the female genital tract, i.e. by coitus interruptus (the withdrawal of the penis before ejaculation), or by covering the penis with a sheath (condom or " French letter ") into which the semen is deposited.

The cervix may be covered by an appliance of some sort (an occlusive cap) which is designed to prevent the spermatozoa from having any contact with the cervical orifice.

The spermatozoa may be destroyed within the vagina by chemical means, so that they cannot make the journey up the cervical canal.

The semen may be removed from the vagina by means of a post-coital douche.

Sexual intercourse may be allowed to take place only at a time when it is believed that there will be no ovum available for fertilisation : the time is commonly known as the " safe period."

The couple may abstain entirely from coitus.

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There are other ways of preventing pregnancy which differ considerably from the foregoing.

Mechanical appliances may be fitted into the cervical canal (stud or wishbone pessary), or into the uterine cavity (Gräfenberg gold or silver ring). These allow the spermatozoa to gain access to the ovum and therefore possibly to fertilise it, but by their presence they prevent the embedding of the fertilised ovum, so that pregnancy does not occur.

A woman may be temporarily sterilised by X-ray or radium exposure of the ovaries, the regular production of ova being thereby prevented. It was hoped that this method would prove easy and successful, but it has had to be abandoned, because there is a risk that subsequent progeny may prove to be defective.

It is unfortunate that in practice no one of these methods is alone able to give certain results, but it is found that if two or more of these contraceptive measures are employed *together*, the degree of safety is invariably much increased. This fact is not widely recognised by the public, and usually a couple



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will choose one method and trust to it alone.

Among a hundred consecutive cases referred for advice to the Municipal Birth Control Clinic at Ealing, the following methods were found to have been practised :

Withdrawal	57
A sheath	33
Rendell's pessaries	9
A post-coital douche	9
Abstention	5

Fifteen couples had not previously attempted contraception.

It will be seen that these people had tried various methods, the most popular of which had been withdrawal, but in no case had a combination of methods been tried. In one family the wife, an eclamptic, had had eleven pregnancies, the last ten having been conceived in spite of withdrawal, which the couple were still practising, believing it to be better than nothing. These people may be taken as representative couples drawn from a poor working-class area in the district ; the women had all been referred by medical officers for reasons of ill health, and were probably not

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more experienced or more interested in birth control methods than the average person. It is likely that among a more well-to-do group of people the douche and the foaming tablet would have been more extensively employed.

The technique which is taught at most birth control clinics consists of a mechanical method (an occlusive cap) aided by a chemical method or a douche. If the physician considers it is really important for the patient to avoid conception, his choice is practically confined to this combination, or to the use of a sheath in conjunction with a chemical spermicide. For those patients who are prepared to take slight risks the simplicity of using a single means of contraception may well be advantageous.

The practitioner may be consulted about any of these methods, and he should be able to give a rough idea as to their probable efficiency and to know which of them is most suitable for recommendation. Among other questions, he is likely to be asked whether any method could prove injurious to the woman's health or to that of the child if pregnancy should inadvertently result. Such risks to health as may

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be associated with any given method will be referred to later in detail, but, except in those cases where irradiation has been used, there appears no evidence whatever that contraceptive practices can damage a foetus which is conceived in spite of precautions. It seems reasonable to suppose that out of two hundred million competitors for the fertilisation of one ovum, the victor is not likely to be a physically damaged sperm. Further, experience goes to show that the use of such appliances as the sheath, or the occlusive cap with a suitable soluble pessary, will in no way influence the woman's health or fertility.

At the North Kensington Clinic each patient has the cervix examined per speculum at six-monthly intervals. Among these patients are women who have been using an occlusive cap for many years. Records of these cases do not suggest that genital lesions are likely to be caused by the contraceptive method, whereas the thorough gynæcological examination of the patient is often of great value in detecting pathological conditions in their early stages.

The majority of women using birth control

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methods over many years become pregnant immediately on omission.

In 1930 the Walworth and East London Clinics made an analysis of attempted pregnancies among their patients. Of a hundred and sixteen women who had been using contraceptives for periods varying from one to five years, a hundred and thirteen became pregnant either immediately or within a few months' time after they discontinued their precautions.

Details of the time period for the occurrence of pregnancy after the omission of contraception have been recorded by Dr. Hannah Stone of America. From a series of a hundred and twelve middle-class patients who successfully planned their pregnancies, ninety-five conceived within the first three months, twelve between the fourth and tenth month, four after twelve months and one woman after three years.<sup>1</sup>

The figures of the Walworth Clinic indicate an unusually high fertility rate among its patients. Some interesting observations have been made by Wagner-Manslau on the relative

<sup>1</sup> Bromley, D.D. : *Birth Control : Its Use and Misuse* (Harper Brothers).

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fertility of people in different classes of society. He finds that there is a tendency for less fertile people to rise to the upper strata of society, whereas the more fertile stocks, cumbered by large families, tend to drift towards the poorer classes.

Everyday experience shows that contraceptive methods can offer protection from pregnancy only for the individual act of coitus for which they are used. Nevertheless it should be pointed out to those couples who desire children at a later date, that the chance of fertility decreases considerably with increasing age. Since a nulliparous woman has no chance of estimating her own fertility, it is unwise for her to postpone the first pregnancy for long, unless she is at any rate in the early twenties.

Since pregnancies have been known to occur at the menopause, even some months after the cessation of menstruation, it is advisable for contraceptive measures to be taken for one or two years after the last period. The fear of pregnancy causes much mental distress to some women at the climacteric, and the

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physician should remember this when dealing with menopausal anxieties.

For cases in which pregnancy would always be inadvisable it should be borne in mind that sterilisation is a more certain method of avoiding pregnancy than contraception. This measure may give the patient great relief, both from anxiety and from the trouble and expense of taking repeated contraceptive precautions.

The legal aspect of this operation, if performed for eugenic or voluntary reasons, is still *sub judice*, but in cases in which pregnancy is permanently contra-indicated on medical grounds the question should certainly be considered. The process of sterilisation in the female, though trivial in itself, generally necessitates opening the abdominal cavity. On this account it may be preferable for the woman to employ contraceptive measures, with the understanding that if these should fail, therapeutic abortion will be performed by cæsarian section and the fallopian tubes tied at the same time. Such a woman should be sterilised if at any time the abdominal cavity happens to be opened for other reasons, and

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the woman who must be delivered by cæsarian section should be sterilised at the last occasion when she has had her full quota of pregnancies.

The operation in the female consists of tying or cutting the fallopian tubes so that the ovum and sperm can never meet. In most cases when this is done it is irrevocable ; but recently a modification of the procedure has been made by burying the ampullary end of the oviduct under a slit in the broad ligament. It is claimed that, of such cases which have subsequently been repaired, about twenty-five per cent have become pregnant.

Although sterilisation in the male is never directly necessary on grounds of health, it is occasionally performed for other reasons, and in the future this is likely to be done more often. Thus a man who has recovered from insanity, or is a sufferer from severe hereditary defect, or is a confirmed epileptic, would be considered by many to be eligible for sterilisation. The reader who is interested in the ethics of sterilisation should refer to such a book as *Voluntary Sterilization*, by C. P. Blacker, M.D., M.R.C.P. (Oxford University Press).

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In the male the operation is comparatively trivial and an expert can perform it under local anæsthesia in the consulting-room. It consists of separating the vas deferens from the spermatic cord and dividing it between two catgut ligatures. The operation necessitates only two or three days' absence from work. The spermatozoa themselves form such a small proportion of the seminal fluid that their absence after vasectomy hardly causes noticeable alteration in the quantity or quality of the semen. Physical desire and satisfaction in coitus and all other sexual attributes remain unaltered. It is claimed that if vasectomy has been performed, a repair operation can very occasionally restore the patency of the spermatic duct.

Finally, it may be asked what improvements on these cumbersome methods for controlling conception are likely to be made ?

Among other possibilities, the following are worth mentioning.

It has been found that the subcutaneous injection of semen will render the tissues of the receptor temporarily inimical to spermatozoa.



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How long the spermatoxins thus produced will last, and how reliable their formation will be, has yet to be proved.

A possibility suggested by recent endocrinological work is the separation of some product which, when taken at each menstrual period, would cause exfoliation of the uterine mucosa, whether the woman was pregnant or not. This measure is more problematical than the former and perhaps commends itself less to the medical mind.

In America, temporary sterilisation of the male has been attempted by the application of heat to the testicles. The rationale for this process is based on research work which has yielded most interesting facts. It is known that if the temperature of the scrotum is raised by a few degrees, spermatogenesis will be temporarily arrested. Lately it has been shown that in certain animals (e.g. goat, pig) artificial heat to the testicles is not necessary to produce this result. If the scrotum is prevented from cooling by being wrapped in a waterproof and heat-proof covering, after about fifty days the normal bodily heat will

be sufficient to produce sterility of a year's duration.<sup>1</sup>

These facts throw much light upon the question of sterility associated with cryptorchism, and suggest that the scrotum has the function of a "cooling chamber" for the testicles. This will explain the flaccidity of the scrotum in the hot or exhausted male, the testicles being then allowed to drop far from the warm body. When exposed to cold, the scrotum immediately tightens by the action of the cremasteric muscle, and the testicles are thereby brought nearer to the warmth of the body.

Although spermatogenesis is arrested by the application of heat to the testicle, spermatozoa which have been stored in the epididymus will be in no way affected. In spite of such obvious difficulties, it is possible that some technique of this sort will be of value in producing human sterility.

The present day contraceptive methods, which depend so much upon the trouble people

<sup>1</sup> Prof. Herman Knaus : *Periodic Fertility and Sterility in Women* (Wilhelm Maudrich, Vienna).

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are prepared to take and their ability to pay for appliances, inevitably tend to work against eugenic progress, since they allow the more careful or wealthier individuals to limit their families, whilst less careful or poorer people breed more freely. This factor operates not only among individual families but also among national populations.

It has been shown that the population of Europe will soon be on the decline,<sup>1</sup> whereas the Asiatic races may not be able to control their breeding rate so effectively. It is evident, therefore, that to maintain a world balance, scientists must produce a contraceptive method so simple and so cheap that it can be employed even by vast numbers of poverty-stricken and uneducated people.

<sup>1</sup> Enid Charles, M.A., Ph.D. : *The Twilight of Parenthood* (Ernest Benn).

## CHAPTER III

### POPULAR METHODS

#### THE SHEATH

This appliance is popular throughout the world. It is estimated that one million, forty-four hundred thousand sheaths are sold every day in America. The great advantage of the method to the general public is obvious. It is cheap, it can be very efficient, and it is generally accessible. As well as affording protection against pregnancy, it is a fairly good safeguard against venereal infection.

The term "sheath" may be taken to include thick rubber washable sheaths, fine animal skins, and the more popular thin rubber condom or "French letter." All these are made of a suitable size to fit over the erect penis; they are put on before intercourse, and the semen being deposited entirely into the sheath, there can be absolutely no risk of impregnation if the sheath is perfect and correctly used. In

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point of fact these ideals are not very frequently attained.

Sheaths are usually supplied rolled like a surgical finger stall. They can be unrolled on to the erect penis very quickly. The patient should be instructed that the penis should *never* enter the vagina without the sheath already in position. Very few people realise that there may be some leakage of spermatozoa long before emission has taken place. After emission the sheath should be steadied with two fingers and withdrawn with the penis. It is inadvisable to wait long, for, as the penis shrinks, the semen may leak round the edges of the sheath.

If a condom is used it is generally made with a teat end to act as a receptacle for the semen, which will then have less tendency to be forced up the sides of the penis and leak round the edge of the sheath. Nevertheless, the teat end may be rather clumsy and at the beginning of marriage is liable to interfere with the easy stretching of the hymen. A careful user can arrange to leave a small surplus at the end of a plain sheath for the reception of the semen,

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and provided this is remembered the plain condom need cause no uncomfortable constriction to the male and may be considered the more æsthetic.

One of the difficulties if a sheath is employed, and particularly at the beginning of marriage, is that inadequate secretion from Bartholin's glands may cause insufficient lubrication, with considerable discomfort to both partners, as well as a risk of tearing the sheath. In these cases, the free use of a non-greasy lubricating jelly (page 156) will be of great assistance : such a preparation is incomparably more efficient than vaseline, which is the lubricant popularly favoured, and which is inadvisable with any sheath which is to be washed and used again.

Occasionally lubricating or contraceptive substances are put inside the sheath, as well as outside. Used thus, there is a tendency for the sheath to slip off during the movements of coitus.

When the highest degree of safety is desired, it is advisable also that the woman should insert a soluble suppository before coitus ; this can be done very easily while the husband

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pauses to adjust the sheath. An alternative procedure for experienced couples is to keep at hand some quickly working spermicide, in case there should ever be a breakage of the sheath. This accident is generally evident on withdrawal, and the woman should either douche promptly or insert a spermicidal jelly. Should neither of these courses be possible, the vagina can be rapidly cleansed by two fingers covered with soap : even toothpaste is said to be a good spermicide for emergency use !

It should be remembered that if a washable sheath is employed it must be thoroughly cleaned before coitus may again take place.

These instructions, so laborious on paper, are not hard to master ; and many couples are well satisfied with this method for their permanent use. It is evident that if all couples were prepared to use these measures, contraceptive technique would attain a very high degree of safety. In actual fact the disadvantages are insuperable to many people.

From the man's point of view even the finest covering over the penis may be sufficient slightly to dull sensation ; this is particularly

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so for uncircumcised men. On the other hand, this dulling of sensation may occasionally be an advantage. For those couples where the man's ejaculation is too precipitate the use of a sheath may give a more prolonged coitus.

To many the interruption of adjusting the sheath after erection is tiresome, and a very large proportion of men who suffer from erratic or incomplete erection are totally unable to employ a sheath. On this account it is unwise for the physician to urge patients to adopt this method if they appear unwilling, for many men are most diffident about making an admission of sexual difficulty, and would prefer even to be thought obstinate for their refusal to co-operate.

From the woman's point of view the physical drawbacks are usually slighter than from the man's. In fact a large number of women cannot tell whether a condom is being used or not, though this is certainly not the case in all women. There are, however, many women who intensely dislike knowing that a sheath is being used ; in addition there are couples who



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value the intimacy of complete genital contact very highly for purely emotional reasons, as do many women the presence of semen in the vagina.

It is doubtful whether wearing a sheath is likely to cause sufficient interference with sexual feeling to precipitate an anxiety condition in either the man or the woman, provided that they have no active dislike of the method ; but where distaste or interference with orgasm is caused to either partner, it is advisable to change the method on purely medical grounds.

An argument against the sheath has been suggested by Dr. Marie Stopes, who holds that certain substances from the seminal fluid are absorbed by the vaginal walls, to the benefit of the woman's health. This matter has not been proved, but it is known definitely that certain hormones are capable of absorption per vaginam.

When advising a couple about birth control the practitioner should remember the claims of the sheath, particularly for the following cases :

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(1) For those couples to whom pregnancy would be disastrous the use of a reliable sheath, together with the insertion of a jelly or a soluble pessary, will be the method which will give the highest degree of safety.

(2) For couples at the beginning of marriage, when the woman has not learned the use of a cap.

(3) For couples who are unable to get personal advice on the fitting of a cap.

(4) For women after childbirth until the cap has been refitted.

(5) For emergencies when a cap is not available.

(6) For some cases of premature ejaculation.

(7) For cases in which there is risk of either partner conveying venereal infection.

(8) For couples where the woman has a strong dislike to using an occlusive cap.

The choice of sheaths, their keeping properties and their price are matters of great importance.

There are very many brands of sheaths, but few makers have put on the market a thin rubber condom which is consistently perfect. Rubber specialists find that this is an extremely difficult ideal to attain: a sheath which appears intact to the naked eye may prove

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to be riddled with holes on microscopical examination. In addition to this, rubber perishes rapidly, particularly if roughly used, or kept in a warm place.

The traffic in "French letters" is scandalously corrupt. Chemists can play on the gullibility of their customers to any extent. If a man asks for the best sheath in the shop the chemist can sell him for 10s. 6*d.* a sheath which may be sold to another customer for 6*d.* in a different envelope, and a good profit made even at that! Further than this, the chemist is under no compulsion to keep his stock of rubber goods fresh, and, particularly in the smaller shop, the customer stands every chance of getting old produce. A purchaser should insist on a make of sheath which bears a date after which the rubber will not be considered to be safe for use.

There are many firms which advertise "tested and guaranteed" sheaths, but in spite of this the quality of the goods is lamentable. Dr. C. I. B. Voge, working for the Committee on Maternal Health of New York, investigated 3,000 sheaths bought in the open market

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in this country. Out of this number, 45 per cent were made of defective rubber, and half of this number actually contained holes. A good condom will be mentioned in the appendix ; the rubber of this brand is fine and highly distensible, and each sheath has been subjected to a high pressure test. Condoms are meant to be used once only, and thrown away. It is generally believed that goods of this sort are impractical for use in tropical climates. Actually they can be specially packed for use abroad ; and they can be posted regularly to any place in the world and will retain their elasticity in the worst climates for at least a few weeks.

Among poorer people thicker, washable sheaths are frequently employed. These are less pleasant in use but can generally be retained over a period of several months. On account of the thickness of the rubber and therefore its lesser distensibility these sheaths are made in three sizes, small, medium and large, the small or large sizes being only rarely required. Patients who are using these goods should be instructed to put the used sheath straight into

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a receptacle full of water. At a later time, the sheath should be washed with clean water, or soap and water, tested for possible leakages by filling with water, dried, and powdered with French chalk. Unfortunately these sheaths keep best if they are stored flat, although it is essential that they should be rolled before application. If the French chalk is applied thickly it should be wiped off before coitus, otherwise discomfort is caused to the woman.

It is the custom at many of the birth control clinics to offer sheaths only very occasionally and as a temporary measure. The writer believes this to be a mistake. On taking histories one not infrequently finds couples who have used a sheath in the past and have no dislike of the method, but have merely come for other advice because it has "let them down." If a good sheath is supplied, with a soluble pessary, and full directions for use, no safer or more simple contraceptive method could be recommended.

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### THE POST-COITAL DOUCHE

This practice is widely used in France, but in this country it is preferred chiefly by the wealthier classes who have toilet convenience for douching. It necessitates the woman getting from her bed immediately after coitus and thoroughly washing out the vaginal passage.

The disadvantages of the method are obvious. Firstly it is most uncertain. In one investigation the failure rate amounted to 73 per cent.<sup>1</sup> The reasons for its fallibility are simple—if the semen is shed against the cervical orifice, even within a minute or so the sperms may have swum further than the douching solution will penetrate. It is believed by some that the uterus sucks in the semen during the moment of orgasm ; actually this matter is still unproven and appears improbable, but, if in certain cases it were true, it furnishes an additional explanation for the frequent failure of the method.

Skill and care are required for successful douching ; the rugæ of the vaginal passage are

<sup>1</sup> Enid Charles, M.A., Ph.D.: *The Practice of Birth Control* (Williams & Norgate).

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intricate and it is more than probable that a few sperms will escape from a douche unskillfully administered, later to find their way up the cervical canal.

The disturbance of the whole procedure to the woman can hardly be over-estimated. To be active and intelligent at a moment when the physiological reaction dictates rest is extremely exacting. This method causes many women to become disinclined for coitus, and is responsible for many resulting difficulties.

The advantages of the douche are mainly those of cheapness and accessibility. Once a syringe has been obtained, the method has no cost whatsoever, but unfortunately it is just the women who can only afford a douche who have so few of the toilet facilities which it demands. In certain cases when there is a risk of gonococcal infection a douche of potassium permanganate (5 grains to the pint) will go far as a prophylactic. Other than that there are women who have a neurotic objection to semen within the vaginal passage, and to these the method may be always desirable.

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Women frequently ask whether regular douching is necessary for health and cleanliness ; most certainly this is not so. It is believed that Döderlein's bacillus is a valuable inhabitant of the vaginal tract, since its presence is associated with the production of lactic acid. Too frequent douching may possibly disturb the flora, indirectly allowing infection of the vaginal or cervical tissues. It would seem wise therefore to limit douching to two or three times a week, although it is difficult to be dogmatic, since many women who douche daily retain a perfectly healthy cervix and vagina. In cases of cervical erosion or chronic vaginal discharge there is good reason to include a therapeutic cleansing douche in the contraceptive technique, and in severe cases, if there is much pathological discharge, it may be desirable to douche shortly after coitus and remove the cap.

It is important that the patient should understand the technique of douching. The solution must distend the vaginal walls, and thus obliterate the rugæ where the sperms will be protected. Sufficient pressure to do this can



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only be acquired by closing the vaginal orifice around the douche nozzle, either by pressing it tightly round with the fingers, or, in the case of the bulb or "whirling spray" syringe, by pressing the conical shaped plug against the vaginal orifice.

It is important also that excessive tension is not employed, since any pressure above 200 mm. of mercury might force the solution past the cervical os and into the uterus. With the ordinary douche can this may be avoided by limiting the height of the can to not more than two feet above the nozzle ; when the vagina is full the fluid may be released and the passage again flushed out. With the whirling spray syringe the bulb must be pressed only between the thumb and first finger, which are insufficiently strong to exert excessive pressure. With this appliance the solution is returned several times from the bulb to the vaginal passage until the semen is thoroughly mixed with the spermicidal solution. Especial care should be taken to clean the syringe thoroughly after use.

There is a popular belief among women that

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when douching there is a risk that the sperms may be "washed up" into the uterus. Clearly this is not possible, for any sperms which are touched by the solution will have their vitality destroyed.

Plain water itself is highly spermicidal provided that the proportion is greater than three of water to one of semen, the solution then being isotonic to the sperms. Actually a chemical of some sort is usually added to the douche. Two simple household substances are very much more spermicidal than the popular Lysol or potassium permanganate. These are a solution of vinegar (a tablespoonful to the pint of warm water), or a lather of soap (such as is made by a tablespoonful of Lux to a pint of water). Both these materials are cheap and always to be found in the household. It is only occasionally that a soap solution of this strength will cause smarting in the vagina. In these cases the vinegar or plain water should be substituted, or the vagina can be given a final rinse with plain water.

The physician should remember that whilst it takes but a moment to advise a douche,

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it is a more lengthy matter to carry out the recommendation. In this country the bidet is seldom to be found, frequently a hot water supply is not available, and no water closet is present in the bathroom. The most comfortable time for douching is when the patient is actually in her bath and can lie down under the warm water when the syringe is to be used. At other times most women find the procedure chilling, tiresome and laborious.

### COITUS INTERRUPTUS. "*Withdrawal*" or "*Being Careful*"

This is undoubtedly the most widely used birth control method in the world, and probably the oldest. Its efficiency must have been questioned since time immemorial, but its serious disrepute is but a matter of a very few years' standing.

The object of the method is to get sufficient stimulation to secure orgasm, but to withdraw the penis from the vagina just prior to emission.

From the point of view of safety the method

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must in general be considered hazardous, and for a reason which is unknown to most people ; that is, that the pre-ejaculatory fluid which comes with erection may contain active spermatozoa. Dr. Abraham Stone examined specimens of the mucus at the male meatus during erection ; out of twenty-four specimens from eighteen individuals, five were found to contain spermatozoa.<sup>1</sup>

More commonly recognised is the difficulty of withdrawing the penis in time. For some the timing of this control is impossible, for others by no means too difficult ; but even in the latter cases the control and skill required will vary with the temporary conditions—tiredness, or alcoholism, and with the degree of emotion during the coital act. Taking these factors into consideration, no man should consider himself safe to use withdrawal until he has already practised the method consistently and successfully—a course which would scarcely commend itself to most people !

The method is almost universally known, it

<sup>1</sup> Dickinson and Bryant : *Control of Conception* (Baillière, Tindall & Cox).

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costs nothing, and requires no preparation. It is not therefore surprising to find that the majority of couples have, at some time or other, attempted it. Although families of large size are frequently found in which all the children have been conceived in spite of this method, the parents are probably correct in their belief that their care has gone some way towards spacing the children, and that perhaps twenty pregnancies instead of ten might have occurred without it.

It was mentioned in the first chapter that any method of contraception which interferes with the satisfactory completion of the sexual act is liable to precipitate or accentuate a condition of nervous strain which is called "anxiety-neurosis." This condition, while not endangering life, may endanger ordinary good health and happiness to a very serious degree. Unfortunately the recognition of anxiety-neurosis is frequently complex, and, moreover, it manifests itself in such diverse ways that a physician who has not had full opportunity to study it during his training may have difficulty in making a diagnosis. Nowadays all teaching

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schools and examining boards are giving increasing attention to this subject, so that it is only a matter of time before the condition is accepted as a contributing factor to many varieties of ill health.

The physician who is interested in the matter will find very many examples of these cases. Typical among them is the sudden failure in health in a newly married woman who complains of insomnia, indigestion and lassitude. It will almost always be found that the full sexual orgasm has not been established, and this not infrequently on account of a faulty sexual technique which can be remedied by sound advice.

Important among the factors of anxiety conditions is the practice of coitus interruptus. It must be considered in its effect on either partner.

As regards the male, it has been suggested that direct injuries to the genital system may be caused, such as enlargement of the prostate, congestion of the seminal vesicles, etc. Opinion in general is against this being so, and it is probable that the trauma is to be looked for

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in the nervous system and not in the genital tract.

Withdrawal before ejaculation has taken place causes generally some deprivation of pleasure to the man, as well as a strain (very severe for some) of keeping control throughout a process which should normally be spontaneous and overwhelming. Some men can apply this restraint even for a period of many years and apparently suffer in no way at all. Others will quickly show signs of less satisfactory health or temperament.

From the woman's point of view there are types of cases in which withdrawal may be practised with little or no ill effect, as, for instance, if the woman is able to reach her orgasm either before or in spite of withdrawal, and if she feels able to trust her partner so that she does not share in the responsibility of timing it. So, also, if the woman is equally frigid whether coitus is interrupted or not, the practice will hardly affect the difficulties with which she has already to contend.

There is, however, an additional restraint to be considered. There is a very common belief,

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which is entirely erroneous, that if the woman does not experience an orgasm the likelihood of pregnancy will be much diminished. It is possible for women to exert so much mental control that the orgasm is entirely inhibited. This practice is called "holding back." It is so taken for granted by many women that, unless the physician remembers to speak of it specifically, he may recommend a change from an unsuitable method of birth control to a better one and yet leave the woman practising her own restraint, believing it to be an additional safeguard. One can say with certainty that this practice is detrimental to a woman. The very fact that she has to "hold back" proves that she is capable of orgasm and that she desires it. Her repeated frustration will lead in many instances to frigidity, and an imposed frigidity of this type is always detrimental to the emotional or physical health.

The direct physical results of "holding back" are of gynæcological importance. The exact process of orgasm in the female is less simple than in the male. It is associated with involuntary contractions of groups of muscles,



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mainly of the vulva, cervix, uterus and pelvic floor. During sexual intercourse the entire genital tract becomes tumescent, but after the orgasm is reached, decongestion takes place, very similar to the detumescence of the penis in the male. Failure to achieve the orgasm will leave these organs in a state of congestion which will be greater in the highly stimulated woman than in the frigid one. With constant repetition of these events, a condition of chronic pelvic congestion becomes established. The ovaries become hypersensitive and cause discomfort or even pelvic pain; reflex backache is common and leucorrhœa and menorrhagia are frequent concomitants.

It is strange that the parallel syndrome in the male is so much more widely recognised. Aching testicles and sacral backache are well known to be relieved by orgasm—even by nocturnal emission. The equivalent reaction in the female is incomparably more frequent, but, because it is the custom that women should know little and say less about their sexual reactions, the gynæcological departments are crowded with patients regularly

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seeking relief from the results of unsatisfactory coitus in the form of a bottle of medicine.

It is true, fortunately, that ergot and strychnine may control menorrhagia, and "mist: alba" daily may relieve pressure from the pelvic colon upon a hypersensitive ovary. Finally, the invaluable bromide may go some way to compensate for deficiencies in our medical and psychological armamentarium.

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The use of a chemical spermicide within the vaginal passage has been practised pretty widely for some fifty years ; during the last few years much notoriety has been given to these substances, and the market is being flooded with new products, vaunted in the most extravagant terms, both in the medical and lay Press. The majority of these preparations have little or no spermicidal value, and may even be made of unsuitable or injurious chemicals. Since the vaginal passage is readily capable of absorption it is important for the

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physician either to know what substances are contained in a product which he recommends or to make certain that they are preparations which have been tested and approved by the National Birth Control Association.

Some excellent research work has been done on these products by Dr. J. Baker, published in the *Journal of Hygiene*, and by Dr. C. I. B. Voge, published in the *Physics and Chemistry of Contraception*. The matter is too complex for elaboration in the present work. It is hoped that before long more universal standards for measuring spermicidal action will be agreed upon, and that this will result in real improvement in chemical technique. Great advances may be achieved within the next few years, so that the present methods may be completely superseded. A list of up-to-date preparations may always be obtained from the National Birth Control Association, 26 Eccleston Street, S.W.1. Meanwhile, the preparations mentioned in the appendix are considered suitable for recommendation.

In the past, spermicides have been employed

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as soluble suppositories or as tablets, made to be inserted deeply into the vaginal passage before intercourse, a waiting period of three to ten minutes being necessary before their optimum effect will be obtained. It is desirable that the woman should be in the recumbent position after their insertion, otherwise the preparation is liable to leak out of the vagina.

Quite recently spermicides have been prepared in the form of jellies for injection into the vagina. These, though more expensive than the suppositories and more laborious in application, are a very great advance in chemical contraception.

Of soluble pessaries in general, it can be said they give a moderate degree of safety when used alone, and that they are very simple to use. Even if the woman has omitted to insert the pessary before coitus, she can still do so soon afterwards and the method will be better than nothing. There are some women who have used the soluble pessary throughout their whole married life, spacing their children exactly as they wish—and yet others who try the same method become pregnant on the very first

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occasion. Between these extremes can be found every degree of failure and success.

Although the chemical jellies will undoubtedly give better results, the difficulty remains that no matter how good the spermicide, nor how well the vehicle will spread it across the cervical canal, if the bulk of the semen is shed against the external os, this hypothetical chemical barrier will probably be insufficient to bar the way against such heavy odds. If, however, the cervix is covered by an occlusive cap, the presence of an efficient spermicide in the vaginal passage will be of the greatest value.

Soluble suppositories can be divided into three types :

- (1) Those made in a base of cocoa butter,
- (2) Those made in a base of gelatine and glycerine,
- (3) Dry "foaming" tablets.

The two former have a more universal application, but, since they are designed to melt at the body temperature, they cannot be employed

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where the climatic conditions rise above that heat. Naturally this is a very grave disadvantage which cannot be overcome.

### COCOA BUTTER TYPE

Until recently the most popular type of soluble suppository consisted of a cone of cocoa butter, made up with about 2 gr. of a quinine salt. These melt at body temperature, the cocoa butter base making a thin greasy film over the vagina and penis. Unfortunately this substance has a definite odour and the greasiness is slightly unpleasant. Very occasionally, one or other of the partners will react to quinine, either generally or with local irritation or a rash. Curiously enough, recent investigation has shown that the efficacy of the preparations depends less on the quinine they contain than upon the greasiness of the base, which has a mechanically inhibiting effect upon the spermatozoa.

These old-fashioned pessaries can be considered fairly satisfactory for any woman who is prepared to trust to a chemical method alone.

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The expectation of success of quinine pessaries has been estimated at about 54 per cent.<sup>1</sup> They are not very expensive, they will be effective whether the vaginal passage is dry or lubricated, and they can be stored well in average climates though they are not suited for tropical temperatures. There is one great disadvantage: they cannot be employed for use with a rubber occlusive cap, nor with a washable sheath, because the rubber will perish very quickly when in contact with this greasy pessary; nevertheless, they can be used with a condom, and except for the æsthetic disadvantages mentioned they remain a fairly efficient choice for this purpose.

It is well for the physician to know that there is an almost universal superstition that out of every box one pessary is a "dud," i.e. the spermicide has been omitted. How this superstition arose is very difficult to guess; the reputation may well have been spread by the frequent failure of the method being apparently explained on this basis. The belief dies hard

<sup>1</sup> Enid Charles, M.A., Ph.D.: *The Practice of Birth Control* (Williams & Norgate).

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and many patients remain unconvinced by explanation, believing the physician to be on the side of the deceivers !

### GLYCERINE AND GELATINE TYPE

Glycerine soluble pessaries, which look much like rectal suppositories, are now being widely employed in private practice and at birth control clinics for use either with a sheath or an occlusive cap. They will not injure the rubber and they will melt whether vaginal secretion is present or not. They have no odour, nor do they irritate, but some women dislike the slight stickiness which they make, and with others they appear to be hygroscopic so that excessive vaginal moisture may be caused.

Until recently these were made up with quinine hydrochloride, but since investigation has pronounced against quinine or, indeed, any of the alkaloids being effective spermicides, these have now been abandoned, and preparations of this type have been superseded. It is found that suppositories which incorporate substances such as citric acid will increase the



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acidity of the vaginal contents, and will more rapidly exert a lethal action on the spermatozoa.

### FOAMING PESSARIES

A fairly recent innovation is the dry foaming pessary. These have an appearance much like aspirin tablets, and consist of substances which, when introduced into the moisture of the vagina, will dissolve with the formation of carbon dioxide and a fine spermicidal foam. Theoretically this should be very efficient, because the foam should permeate into the folds and rugæ of the vaginal passage, and into the mouth of the cervical canal.

Unfortunately a serious disadvantage has made these pessaries of little use in regular practice. They all depend on the presence of an adequate amount of moisture in the vaginal passage for their solution. Many women, particularly frigid women, do not produce enough of this secretion, and others who usually secrete adequately, may on occasion fail to do so. In these circumstances the pessary may cause stinging to both husband and wife, and may

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be found partially undissolved many hours later. This difficulty can be overcome by dipping the pessary for a moment into water before insertion, but to many this is tiresome and is only advised where the dictates of climate, etc., necessitate their employment.

The advantages of these pessaries are that they have no odour, they are not sticky or greasy; many of them will keep indefinitely in any climate provided the bottle is corked, and the better ones are excellent spermicides. It is claimed for some of them that they are also prophylactics against venereal disease, and in the U.S.A. they must be officially sold for this purpose, as the law does not permit contraceptives to be sold as such. Most of the birth control clinics have given up using these pessaries, as it is so difficult to decide for which patients they will be suitable. Nevertheless, women who have adequate or excessive lubrication may much prefer them to the suppositories with the glycerine base, which are the alternative for use with a rubber cap. At present the two best foaming tablets are both German products; there are a few reputable English

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ones, but these are found more irritating than the German makes. It was claimed at first that these pessaries would be efficient without the help of a mechanical method. A friend of the writer's, who, hoping to be doubly safe, used *two* of the better foaming tablets, conceived at once, and unfortunately her conception turned out to be twins !

## CHEMICAL JELLIES

If the spermicide is introduced into the vagina by injection it is possible to apply it in a dissolved and active condition and also in a more suitable vehicle.

At present there are two types of jelly, simple and foaming. In the latter an acid and an alkaline substance are mixed together, with the production of a fine foam of jelly and carbon dioxide gas. This, with other spermicides which are incorporated in the base, rapidly inhibits the spermatozoa. Unfortunately the introduction of these substances into the vagina is by no means simple. Some preparations provide one nozzle which is to be

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used again for each injection. This necessitates its regular cleansing, and is considered undesirable on that account. An alternative method is to supply tin nozzles, to be screwed on to the tube of jelly and thrown away after each application.

In most instances the nozzle is too pointed for safe insertion and the woman should cover the tip with her index finger and insert it thus shielded into the vagina. This is quite easy in the recumbent position. She can then withdraw the finger and express the jelly from the tube with one or both hands.

These substances are suitable for use in any climate, and will work independently of the conditions of the vaginal secretion.

The serious drawbacks to their use are the expense, which is considerable at present, and the rather cumbersome and ostentatious method of insertion. For this reason the method is not widely employed, but is reserved for such cases as the following :

(1) As the adjuvant to a mechanical method if the woman wishes to take exceptional precautions.

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(2) For rapid insertion if a sheath should slip off or become torn.

(3) For a woman who cannot use a mechanical method and wishes to have the fullest safety from chemical measures alone.

### INTRA-UTERINE APPLIANCES

The stud or wishbone pessary consists of a small metal stem which is fitted permanently through the cervical canal and into the uterus. Its presence generally prevents the fertilised ovum from embedding itself in the uterus.

The method is comfortable and without trouble to the patient, and thus it is a very tempting one to employ. Unfortunately the risk associated with it is so great that it is very little used in this country. Many cases have been reported of serious infection and even of death, owing to the quick spread of infection with the instrument in place.<sup>1</sup>

There seems also the possibility that the continual friction of the metal stem against the interior of the cervical canal might cause the starting-point of a carcinomatous growth.

<sup>1</sup> Dickinson and Bryant: *Control of Conception* (Baillière, Tindall & Cox).

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The Gräfenberg or "silver ring" consists of a small ring of spiral silver or gold wire which is inserted into the uterine cavity—with or without anæsthesia—and is retained by the woman, often for many months.

A few years ago it was hoped that this would prove the ideal contraceptive method. Being entirely intra-uterine it was not likely to spread infection from the vagina or cervix, and, since the mucosa against which it rests is being shed and renewed with each menstrual cycle, there seems little possibility that a carcinomatous reaction could be caused.

In practice the method has been much less satisfactory than had been hoped. Cases of endometritis and salpingitis have frequently been reported and its contraceptive properties are not extremely certain. Of the women who are found suitable for a ring (and these are by no means all) about 5 per cent become pregnant with the ring in situ. Usually the pregnancy ends in abortion, but full-term children have been born with no apparent ill effect on the mother or child.<sup>1</sup>

<sup>1</sup> Fourth *Report* of International Medical Group for the Investigation of Contraception (1931).

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In spite of its serious disadvantages it must remain the method of choice for one type of case—where husband and wife are unable to use any other mechanical appliance owing to strong emotional disinclination. For such a couple the use of a ring may make the difference between continuing marriage or complete abstention. In such a case, the woman may be offered the use of this appliance, provided she has a healthy generative tract.

An entertaining aspect of this method was observed by Dr. Carleton when experimenting with its use in animals. If a ring is placed in the uterus of a virgin rabbit, the animal appears overcome by an urge to motherhood, forming a nest and plucking out her own fur for its lining.

Could such emotions be stimulated in the higher species, the method might have great demands made for it in these modern times !

## ABSTENTION

It is important to consider continence as a means of contraception, for it is the method

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which is advised for millions of followers of the Roman Catholic Church. There are, moreover, other people who feel strongly that continence is the only desirable way of limiting the size of the family.

The problem is a difficult one. There can be no doubt that in mankind the generative system has developed much greater potentialities than are required for the reproduction of one child every twelve or eighteen months.

The urgency of the sexual instinct will vary in different individuals, according to the health and the endocrine balance ; yet probably the coitive impulse is quite as dependent on psychical as on physiological dictates.

Let us first consider the principle of continence as it affects the newly married couple. In countless cases financial difficulties or lack of regular employment will force a young couple either to postpone marriage for many years, or to marry early and postpone starting a family, in order that the wife may be able to carry on her employment. It is common knowledge that there are many individual and social disadvantages caused by the very long



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engagement. Early marriage with the postponement of children is more acceptable to most healthy and happy young people. What, then, can be the situation without the full use of contraceptive measures? Lord Dawson of Penn, speaking in 1921 to the Church Congress, expressed this situation in the plainest terms<sup>1</sup>:

“Imagine a young couple in love with each other—the parents, say, of one child, who feel they cannot afford another child for, say, three years—being expected to occupy the same room and to abstain for two years. The thing is preposterous. You might as well put water by the side of a man suffering from thirst and tell him not to drink it.

“And further than that, if the efforts to abstain are seriously made, the strain involved is harmful to the health and temper—if the efforts do not succeed, the minds of husband and wife are troubled by doubts and anxieties which are damaging to their intimate relationships.”

<sup>1</sup> Lord Dawson of Penn, G.C.V.O., K.C.B., M.D., F.R.C.P.: *Love—Marriage—Birth Control* (Nisbet & Co., Ltd.).

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The truth of this statement is reiterated continually in the privacy of the consulting-room and the birth control clinic. It is the poorest people, living perhaps in one room, with no opportunity for reticence or for separation, to whom this practice is likely to be the most distressing. A clinic patient having already six children, and whose husband had been unemployed for two years, spoke simply of their sexual life: "Why, Doctor, it is the only happiness we can afford."

Let us see how these matters affect the middle-aged couple who have been married longer, and in whom the coitive impulse is less urgent.

Most people who are living under the intimate conditions of marriage find that sexual intercourse is an important factor in the maintenance of a harmonious marital relationship. The accomplishment of the sexual act will bring a recurring sense of physical and psychical well-being, and a reassurance of being loved, of potency and of self-esteem. To many people the value of this reassurance may altogether outweigh the purely sensual

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pleasure of the act. Indeed, a leading physician has stated that in a civilised society the majority of coital acts are performed for the attainment of reassurance, and not from motives of pure sexual desire.

Thus the physician who recommends abstinence should realise that he may be inflicting a burden which is far greater than the deprivation of a sensual pleasure. Before long, symptoms of anxiety-neurosis are likely to appear, either in the form of functional ill health or disturbances of temper or of disposition.

These matters have been most ably summed up by Mr. Kenneth Walker<sup>1</sup>:

“ Whilst a given degree of sexual tension may have little effect on the general health of one, in another it may be productive of an acute anxiety-neurosis. Physiologists as a class are prone to forget the variations in emotional stability, and moralists are no less apt to assume that will power and idealism can do for one man or woman what they have done for

<sup>1</sup> Kenneth Walker, F.R.C.S. : *Sex Difficulties in the Male* (Jonathan Cape).

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another. Both these fallacies are as serious in their results as they are common in their occurrence. The actual truth is that the price anybody is called upon to pay for continence varies from zero to a hundred."

Reference has so far been made to the reactions of the average man and woman. But an important minority exists (often among the most cultured and outstanding people) in whom the sexual instinct has become altered in its development, so that its adult manifestations are unusual; indeed, it may be so repressed that normal desire is partially or wholly absent.

Individuals of this type will have difficulty in understanding the sexual feelings and necessities of others, and should they themselves be people of influence, such as teachers, doctors or ministers, their advice—which must inevitably be biased by their own experience—may prove deleterious to more ordinarily constituted people.

Among the opponents of contraception will be found some who feel that any artificial interference in the sexual process is

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“unnatural” and repellent. Prejudices concerning the sexual organs and the sexual act are very widely found in civilised communities, and since they are deeply felt, it is hardly possible to dismiss them by mere argument or persuasion. The advocates of this view may occasionally be brought to agree that an artificial contraceptive appliance in the vaginal passage is no more unnatural than a denture in the oral cavity. More often they are unable to understand that all others do not share their repugnance and their disapproval of contraceptive measures.

Not infrequently the problem is presented where only one of a couple wishes to abstain, either from religious conviction against birth control or from disinclination to sexual life based on individual inhibitions. Such marriages may be productive of great unhappiness and deep, unspoken resentment on the part of the deprived partner. The situation is particularly difficult where a woman with average sexual needs is married to a reluctant husband. It is rare that a woman can bring herself to acknowledge greater sexual

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feeling than her husband is willing to satisfy, and more often than not the husband remains unaware of the difficulties he is causing his wife.

Explanation, and advice on contraception, may help an ill-adjusted couple, provided their abstinence has been imposed on them by external circumstances and has not arisen as the expression of a deep-rooted dislike of sexual intimacy. Even where such dislike is found to exist, the help of a skilled psychologist may be of great value in resolving the difficulty.

It should be remembered that it is always unwise to urge a line of sexual behaviour on another person, for in every case the sexual life of the individual is intricately bound up with his physiological and psychological needs and those of his partner.

The most that a physician can generally attempt is to remove fear or ignorance where they contribute to a difficult family adjustment.

### THE "SAFE PERIOD"

The Roman Catholic Church permits one alternative to the method of abstention—the

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reliance upon the "safe period" for coitus, although, as yet, it cannot be claimed that this method is reliable.

During the last few years, medical opinion has re-estimated the position of the "safe period" in the menstrual cycle. It was formerly believed that the week following menstruation was the most likely for conception and the mid-period time the least probable; the exact reverse is probably the case. Two workers, Ogino and Knaus, have made exhaustive studies of the ovulation time in the female, and have placed it roughly fifteen days prior to menstruation, in a 28-day cycle.

Now it is held by Knaus<sup>1</sup> that the process of fertilisation must occur during the twenty-four hours which succeed ovulation. Should it occur later than that, the maturation and embedding of the ovum will be insufficiently advanced to allow its retention in the uterus which is rendered unsuitable for it by the succeeding menstrual period. Knaus holds, also, that three days is the maximum time during which a

<sup>1</sup> Prof. Herman Knaus : *Periodic Fertility and Sterility in Women* (Wilhelm Maudrich, Vienna).

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spermatozoon can remain active in the secretion of the female generative tract, and at the temperature of the interior of the body.

If the ovulation date can be placed accurately, conception must therefore occur from a coitus not earlier than three days prior to this date, or later than one day following it.

Thus for practical purposes the period of possible fertility can be reckoned as from the 19th to the 13th day prior to the expected menstruation, and the "safe period" should include any other days of the menstrual cycle. In the case of a woman whose menstrual cycle is totally irregular, the placing of this date becomes impossible; but, provided that her periods do not occur at shorter intervals than twenty-five days, she could reckon that the few days succeeding a menstrual period will give her the maximum chance of infertility.

This fascinating and convincing theory is proving valuable in the treatment of sterility, and may prove to be an important contribution to contraceptive technique. Nevertheless, many careful workers have kept records of pregnancies which have followed on a single



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coitus, and it should be remembered that these results show that pregnancy can occur on any day of the menstrual cycle, including the days of the menstrual period itself.

Akin to the belief in the "safe period" is the reliance which is placed by many on the infertility accompanying breast-feeding. The theory is as widely held as it is fallible; and the physician should always be careful to warn a lactating mother to take contraceptive precautions. A pregnancy repeated within a few months of childbirth is not only detrimental to maternal health, but gives a very high mortality risk for the child.

It is absolutely incorrect for a lactating woman to consider herself infertile because her menstruation has not yet returned. Statistics collected by Dr. Marie Koff<sup>1</sup> of America show that out of 884 lactating women, 54 per cent became pregnant whilst nursing. When marital relations are resumed after childbirth it is necessary therefore that full contraceptive precautions should be taken.

<sup>1</sup> D. D. Bromley: *Birth Control: Its Use and Misuse* (Harper Brothers).

## CHAPTER IV

# THE PREMARITAL CONSULTATION

IT IS BECOMING usual nowadays for engaged couples in all classes of society to discuss their views on family limitation, and if a pregnancy is not desired at the beginning of marriage one or other partner may seek medical advice upon the best method of contraception.

Should the family doctor be approachable on this subject, it will generally be from him that advice is sought ; but in other cases a practitioner who specialises in contraception will probably be consulted.

If the avoidance of pregnancy is really essential, the physician is bound to recommend one of two methods ; either the use of a sheath, or of an occlusive cap.

Very often the couple will already have decided which of them is to take the onus of

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the responsibility. In many cases the necessary precautions will be taken by the man, for he is usually the more self-confident and experienced partner ; but should he have a strong prejudice against wearing a sheath, it is unwise to make it obligatory for him to do so. Many men are concerned about their potency at the beginning of marriage, and if the necessity for using a sheath increases this anxiety it is better that the precautions should be undertaken by the other partner. For most men who have had no previous sexual experience the use of a sheath is likely to be very exacting.

Many couples are anxious to keep the sexual relationship unhampered by difficulties of contraceptive technique, and for them the method of the occlusive cap will prove more acceptable than the sheath. When the woman is willing to undertake the contraceptive precautions, there is no reason why she should not learn to use a cap, provided there is time before marriage for her to do so, and provided she and her future husband are willing that the vaginal opening should be widened by a little gentle stretching. To some women this

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suggestion will be repugnant ; to others the assurance that the hymen need not cause pain during the first coitus will bring great relief. Many women have an exaggerated fear of the pain of defloration, and they will be spared suffering both in anticipation and in fact if the hymen is fully stretched before marriage.

There will be cases in which dilatation of the hymen is impossible, either because one or other of the partners dislikes the idea, or because there is not enough time to permit adequate stretching before marriage. The couple must then be advised that, other than the use of a sheath, there remain but two possible methods: the use of a soluble pessary, or the practice of " withdrawal."

It is injudicious to advise coitus interruptus for more than a very short period, but where this practice is combined with the insertion of a spermicidal pessary it may give temporary safety until the hymeneal opening is stretched and sufficiently healed to permit the fitting of a cap.

When it is necessary to advise the use of a pessary before the hymen is ruptured, it may

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be preferable to prescribe one with a cocoa butter base, since its shape and its stiff consistency render its insertion easier than that of a gelatine suppository. For such occasions, the use of a spermicidal jelly is quite impractical, owing to the difficulty of its insertion. All spermicidal preparations will cause smarting of a torn hymen, but this is not usually severe enough to contra-indicate their use.

It is impossible to suggest any exact routine for premarital contraceptive advice, for each couple presents a problem which is essentially an individual one. The physician who is accustomed to giving advice of this sort, will become quick in estimating the probable difficulties of the patient, and perhaps even of the other partner, from merely hearsay evidence.

In many cases, the question of premarital dilatation of the hymen should be considered. The simplicity of this procedure is becoming more widely known, and it is a fact that the majority of women can stretch the hymen fully almost without pain or shock, provided there is sufficient time for them to do so. An interval

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of three or four weeks before marriage should generally suffice for this.

If the possibility of this procedure is mentioned to engaged couples, it should not ever be urged on them, nor should it be advised without the full agreement of both partners. In any given case, it is necessary to examine the woman before advice of this sort can be given, for the size and thickness of the hymen vary very much. Complete absence of the hymen is by no means rare, whereas in some women it may be so thick that penetration by natural means could hardly be effected. To such women the value of preliminary stretching or, more rarely, even of hymenectomy may be very great. A woman who experiences severe pain, which is repeated each time that coitus is attempted, may receive an emotional trauma much greater and more lasting than the physical one.

Some women who are approaching marriage will have great fear that they will suffer injury with loss of blood during coitus, and on this account vaginismus and accompanying severe dyspareunia may be caused

long after the actual defloration has been effected.

The treatment of dyspareunia is outside the scope of this work, but its prophylaxis can often be assured by previous dilatation of the hymen. It is by no means rare to find a couple who have been married many months or even years without penetration having been effected. In such cases, the woman should be reassured and shown how she can herself dilate the hymeneal opening. A patient with dyspareunia will generally bear pain which is self-inflicted more easily than that which is caused by another person.

Stretching of the hymen should be undertaken for a few minutes every day. It is done most conveniently in the kneeling position, and when bathing. The index finger, lubricated with ointment, locates the hymeneal opening, and the tip of the second finger is then inserted beside it. Inward pressure of the fingers in this way will very soon dilate the opening and after a few attempts the tip of the third finger can also be introduced. When the opening is large enough to admit three fingers, it is almost

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certain that the woman will experience neither pain nor bleeding during coitus, and she will be able to learn the use of an occlusive cap if it is desired.

In exceptional cases it may be advisable to perform this operation surgically.

If the hymen is not thick, forcible stretching, which usually entails tearing, can be done under gas anæsthesia. Subsequent pain and bleeding should be negligible, and the patient can return home within an hour or two. When the hymen is really thick, as is the case with many middle-aged women, it may be wiser to incise it in three or four places and tie any bleeding points with catgut ligatures. This can be done under local anæsthesia, but if the woman is nervous a general anæsthetic should be given, followed by a day's rest in bed. In every case, it is best to allow as long an interval as possible before marriage, but when catgut ligatures have been used, an interval of at least three weeks before coitus is desirable.

It is probable that some patients (and possibly physicians also) will be opposed to stretching of the hymen on the grounds that it



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is not a strictly natural process. These objections may be raised either from physiological or psychological standards.

It is held by some authorities that pain and bleeding on the consummation of marriage are not in themselves natural, for if the first coitus occurs at the physiologically correct time—that is, at puberty—the hymen is so yielding that pain is almost never experienced.

Emotional objections may occasionally be so strong that, whilst a patient wishes to undertake the operation, she is unable to bring herself to do so. This dislike of touching the genitalia is not of course innate in human beings, as can be shown by the spontaneous behaviour of infants and very young children of both sexes. But early training, particularly in the Victorian type of nursery, is so harsh and so impressive, that few children arrive at adolescence without having a strong sense of fear or guilt associated with sexual matters. The adult person frequently interprets these emotions in terms of distaste, rather than the more childish terms of fear and guilt. Although the inhibitions which have been caused by severe training

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cannot be fully overcome by reason, it will often help a patient if this basis of her difficulty is explained. She may then understand that some of her lifelong prejudices are no longer valid, and that they should have no place at all in the normal marriage relationship.

There can be no doubt that, for certain types of people, discussion of sexual matters prior to marriage will be very helpful, and it is not until the physician has made a rough estimate of any difficulties that he can advise the contraceptive method which will be most suitable for the patient. In some cases he may judge that the æsthetic difficulties of contraception would loom so large that the couple would be better advised to permit a pregnancy to occur in the normal way, and to postpone contraception until the sexual relationship is well established.

One of the interesting features of contraceptive work is the apparent capriciousness of some patients. Whilst declaring that a pregnancy is the last thing that they desire, they behave so carelessly with contraception that a pregnancy does, in fact, result at once. There

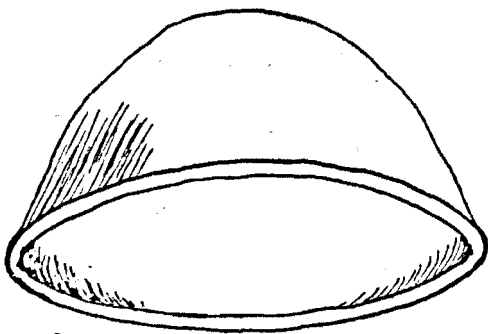
## THE PRINCIPLES OF CONTRACEPTION

are women who will repeatedly conceive in this way, and it seems possible that conflicting desires for the attainment and the avoidance of pregnancy may be influencing their behaviour.

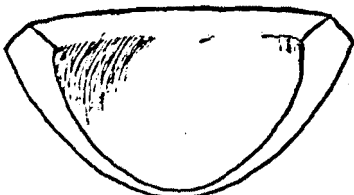
Of those patients who come for contraceptive advice before marriage, only the smallest minority wish to avoid parenthood altogether. The majority desire to postpone pregnancy either for a few months, or until such time as the couple have gained sufficient economic stability for the rearing of children.

It is right that the physician should explain to such patients that their fertility should not be taken for granted, and that the earlier years of marriage may be the best for childbearing. He is often, also, in a position to remind parents that the drawbacks of the "one-child family" are very real indeed.

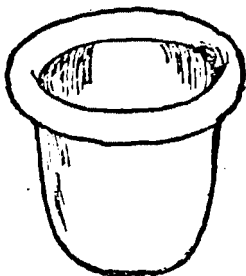
## PART II



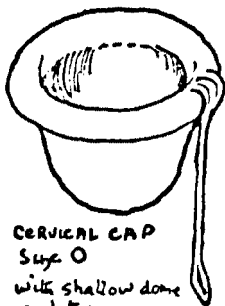
DUTCH CAP 72½



Medium Dumas (transverse section)



CERVICAL CAP size 1



CERVICAL CAP  
size 0  
with shallow dome  
and tie

## THE PRINCIPLES OF THE OCCLUSIVE CAP

UNTIL a new and easier method of contraception has been discovered, some form of occlusive cap will remain the method of choice for most couples, and it is the one most commonly advised at all birth control clinics. It must be remembered that the sheath is the only harmless contraceptive device which gives a degree of safety comparable to that of an occlusive cap, and since a sheath is unacceptable to so many people, the use of a cap must frequently be the method which is employed.

The technique of fitting an occlusive cap is not difficult, but very definitely it requires practical apprenticeship, and the physician who intends to undertake this work is strongly advised previously to attend one or two sessions at a teaching clinic. Although theoretical knowledge alone may be an adequate

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guide for some cases, there are many which require real experience for the choice and fitting of a cap.

Post-graduate sessions with practical demonstrations are held at certain clinics and details of these sessions can be obtained from the National Birth Control Association, 26 Eccleston Street, London, S.W.1.

There is a certain amount of apparatus necessary for this work. It is most inconvenient to do fittings without the full quota of caps of every type and size. The initial outlay for this will cost roughly £3, and though the original stock of rubber caps will perish in two or three years they can be boiled and used repeatedly for fitting purposes.

The physician should reckon that to fit and teach a patient the full technique will take two interviews, the first averaging half to three-quarters of an hour, the second a quarter of an hour. In addition to the cost for this service, the patient will need to spend 8s. 6d. for the outfit and first supply of chemical goods.<sup>1</sup>

<sup>1</sup> Special arrangements can sometimes be made with the Secretary, North Kensington Clinic, 12 Telford Road, W.10, for the supply of contraceptives to private patients, at reduced prices.

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Among the poorer classes of patient this work is not financially practical. Such patients must be referred to the local municipal clinic, if one is available and if the patient is eligible (vide p. 145). A list of these now open will be found in the appendix, and further details can be obtained by application to the National Birth Control Association.

There are three types of cap commonly used in this country : the Dutch, Dumas and Cervical. These diagrams (p. 98) represent the size of the cap actually quoted.

The average retail price for these caps can be taken as follows : Dutch (ordinary weight and light weight) 5*s.*, Dumas 7*s.* 6*d.*, and Cervical 3*s.* 6*d.* The ordinary-weight Dutch, the Cervical and Dumas may last anything from nine months to three or four years, provided that the climate is temperate and that no grease or vaseline is applied to the cap. The light-weight caps have a rather shorter life, six to twelve months being perhaps the average. In tropical climates, caps may need renewal every three to six months, and should be stored in powder and in airtight tins.



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After use, the cap should be washed with soap and water, dried and put away in the box, ready for use when required. It is a common practice to cover the cap with French chalk or powder, with the object of preserving the rubber. If this is done, it must be either washed again before use, or wiped free of powder, otherwise an undesirable paste will be formed when the cap is used. Since these caps will normally last as long as two or three years and cost but a few shillings to renew, the additional trouble does not really appear to be desirable.

Caps which are used for fitting purposes should be washed and sterilised by boiling. There are certain points which are common to the fitting of all caps and which can most conveniently be considered together. Later, the details of choice and fitting of individual caps will be explained.

The procedure is, in all cases, to take the full relevant history. A thorough pelvic examination is then made, including examination of the cervix per speculum if there is any question of a pathological discharge. For the actual

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fitting, the patient should lie on her back, with the legs slightly flexed. A coverlet should reach well down to the knees so as to minimise any feeling of exposure.

It is not always possible to tell from pelvic examination which type of cap will be suitable. In the writer's opinion the Dutch cap has the widest application, and it is a good practice to try a Dutch cap first, and if this is found unsuitable to try one of the other types. Since there are experts who prefer both the Dumas and the Cervical cap, there can be no exact claim for superiority. In any case, there are patients for whom one or other of the types is the only possible choice, so that the full quota of caps should always be stocked.

The cap should be well covered by a non-greasy lubricant (such as K.Y. Jelly) or dipped into a small bowl of soapy water. If a Dutch cap is to be used, it is often advisable to fit it without allowing the patient to see the size of it beforehand. As she is generally unaware that the cap is in place, this will go far to reassure her that, although it appears large, no discomfort will be caused by it. During the

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process of choosing a suitable size, the patient can be told that neither she nor her husband should be able to feel the cap. If she appears unconvinced, it is possible to explain to her that the genital organs lack the power of fine discriminative sensation, as they are not designed for that purpose. It is undoubtedly true that the great majority of men and women are unaware of the presence of an occlusive cap during coitus.

Whilst a choice of cap is being made, it will generally be found that the patient relaxes the vaginal musculature, and (in the case of a Dutch and Dumas cap) increasingly larger sizes will be found necessary. It is most rare to find a woman who shows no vaginismus with a full pelvic examination, and for this reason the fitting chosen at the first interview is merely tentative. It will be better to judge if the cap is actually the correct size when the patient returns with it *already in place* at the next appointment. On this account it is convenient to have a surplus of old caps for fitting purposes. These can be sterilised by boiling, and one of them can be lent to the patient for subsequent

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practice. After her second attendance, when the correct size has been chosen, the patient can get a new one for regular use.

When the final fitting has been made, the patient should be instructed to feel the cap in situ, and to pull it out. This is the most difficult moment of the whole procedure for a woman who is at all diffident. A simple order, such as "Now tuck your finger well up the passage and see if you can find the cap," given in a voice which shows that she is expected to do so promptly with no further discussion, will be a great help to her; and usually, once she has managed this, there will be no further difficulties to be encountered.

When she has found the cap, she is told to pull it out, and whilst the cap is being washed she is instructed how to feel her own cervix. It is least trouble for her to do this lying on her back—under the supervision of the teacher—but if she is shy, it is wisest to instruct her in a stooping or half-kneeling position, both for this and for the subsequent placing of the cap herself. When the vagina is long, and the cervix far back, the half-kneeling position is

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the easier ; the index and second finger reach well into the vagina, and with the patient bearing down slightly, the cervix will generally be located. She is then shown once or twice how to insert the cap, how to make sure it is correctly fitted, and how it feels if the position is incorrect. Finally, the vulva should be dried with a swab of cotton wool, and the patient allowed to wash her hands and to dress.

The ease and celerity with which the teaching is carried out varies with the patient, but also with the experience of the physician and with his tact in dealing with such cases. Some women have a strong disinclination to examining the shape of the vagina and cervix and it is only the steady reassurance of the physician that this is permissible and necessary that enables them to do so without distress. Skill in handling difficult cases will come with practice and it is these which give interest to a somewhat mechanical type of work.

Occasionally it is impossible for a woman to be fitted with a cap, owing to an extreme degree of vaginismus. This reaction is almost invariably of nervous origin and is found mostly

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among women who are not obtaining normal sexual satisfaction. In certain of such cases, it may be advisable to recommend the temporary use of a condom, and later on the fitting of a cap may present no problem at all. In most cases of vaginismus, patience and explanation will overcome the difficulty.

In the first interview it is generally sufficient for the patient to learn how to insert the cap ; details of its use, with other adjuvant methods, can be discussed at the second attendance. The patient should be told to practice putting in the cap several times, to wear it one night and to return wearing it, but on no account to trust to it until after her second interview. She should be told that there is no need for her to be nervous about it when she is alone, for if she finds the cap difficult to extract, she can leave it for a few hours and try again, and that in any case the cap cannot possibly get lost !

The patient usually expresses herself as relieved that the procedure has been so simple, but if she still lacks confidence, it is well to assure her that the technique is only a matter

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of knack, and that it is worth while learning it at once so that she will have the method at her disposal for the rest of her fertile life. In actual fact, it is rare that a woman is unsuitable for wearing a cap, but rarer still for one to be unable to learn the technique of using it.

Many women decide to use a cap in spite of an initial severe prejudice. Almost always this becomes mitigated by regular use, and later they may say that the trouble of the method has become negligible. With practice, the insertion and removal of the cap becomes so rapid that the procedure is but a slight addition to the daily toilet.

The woman may be instructed to insert the cap either just before she requires it, or a few hours previously if she prefers. This alternative is of the greatest value to women who are diffident about any interruption at the time of coitus or any ostentatious preparation when their husband is present. Such women may choose to insert the cap regularly at bedtime, whether they expect to use it or not, in order to avoid being unprepared on any occasion.

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In general, the use of a cap is easy and comfortable, and no more deleterious to the vaginal passage than the use of a dental plate is to the mouth. Simple rules for its removal and cleansing are naturally important. A cap should not be worn longer than about sixteen hours without being removed and cleaned, and not so long if there is any pathological discharge.

It is remarkable how seldom any traumatic effects are caused by the use of these caps. The writer has had but three cases of vaginitis associated with the wearing of a cap. In one, which proved a diphtheritic infection of the vagina, no exact origin could be traced, another was caused by an English make of dry foaming pessary, and the third was a reported case of a clinic patient who developed symptoms of infection after her first attendance for a cap; full investigation of this case was not possible.

A rather more frequent sequel is an attack of urethritis, developing in a patient who has recently learned the use of a cap. Slight pain and frequency are complained of for a few



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days, although the urine remains free of albumen. It is wise to give alkaline medication and to withhold the use of the cap until symptoms have entirely ceased. It is difficult to know whether this syndrome should be classed as a traumatic or infective urethritis. It appears to be akin to the well-known "honeymoon cystitis," which is not necessarily associated with the use of contraceptives.

In the writer's experience no ill results have occurred if a cap has been worn for a few hours during a menstrual period, though it is clearly not advisable that it should be retained for long under these circumstances.

It is almost invariable to recommend the use of a spermicidal ointment over the cap, and either a spermicidal soluble pessary to be used at the time of intercourse or a douche to be employed before removal of the cap, or both. These adjuvants add to the trouble of the procedure, but with intelligence and experience they can be reduced to minimal proportions. The woman should arrange to keep her cap and ointment readily accessible, and if she is employing soluble pessaries also, they should

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be kept in a cupboard or drawer within reach of her bed.

The exact additional technique varies considerably among experts. It is difficult to judge the relative reliability of methods from statistics. The type of patient, their intelligence, and their ability to pay for appliances vary from practice to practice and from clinic to clinic. It has been reckoned that an occlusive cap alone (with an interval of several hours prior to extraction) will give about 70-75 per cent of success, whereas a cap with an additional chemical method will give about 96-98 per cent success.<sup>1</sup> This 2-4 per cent failure is calculated from statistics of women who have been using the double method correctly over a period of at least a few years. It must be taken as the "inevitable failure rate" of the method, and statistics show that the failure among cases where the method has been only partially or carelessly used is very much greater.

It is unfortunate that these results cannot at present be improved upon. It is most probable

<sup>1</sup> Enid Charles : *The Practice of Birth Control* (Williams & Norgate).

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that the substitution of a spermicidal jelly for the soluble pessary would yield better results, but these preparations are expensive and somewhat tiresome to use. English statistics of this combination are too small at present to be of interest.

The additional precautions recommended for use with a cap may be adapted very widely to meet the individual preference of the patient.

It is agreed that no cap can fit so accurately that the small spermatozoon may not make its way round the rim ; hence a spermicidal ointment should cover the rim, and can with advantage be spread thickly over the cervical surface of the cap. It is usual for a soluble pessary to be placed below the cap, shortly before coitus, in order that the bulk of the semen will be destroyed as it lies in the vagina. The choice of soluble pessary is usually confined to one with a glycerine-gelatine base, but in certain cases (vide p. 70) a dry foaming tablet may be recommended.

The most usual procedure is to insert the soluble pessary a few minutes before coitus takes place, and, for those patients who do not

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object to the interruption, this order can be adhered to. On the other hand, some women prefer its insertion immediately following coitus, and it is probable that there is little to choose as regards reliability of the two methods. In the first case, if the soluble pessary has dissolved, it will be well distributed throughout the vagina by the coital movements, but much of it may leak out during coitus, and will certainly be removed on the surface of the penis when it is withdrawn. In the second case the entire bulk of the spermicide will remain in the vagina, and the pessary is likely to dissolve in the semen very quickly.

A third method is sometimes advised, which aims at the destruction only of those sperms which invade above the cap. Either a large lump of ointment, or a soluble suppository of the gelatine-glycerine type, is placed on the cervical side of the cap, preferably not longer than an hour or so before coitus. It is then unnecessary to pay attention to contraceptive measures at the time of sexual intercourse, so that this choice commends itself especially to women who find any interruption objectionable.

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But in this instance the bulk of the semen will not have been in contact with the spermicide, so that it is advisable to douche the vaginal passage thoroughly before removal of the cap (vide p. 51). Some clinics regularly advise this method to women who will douche, and the use of a soluble pessary is omitted entirely.

With the other two methods, if extraction of the cap is desired earlier than eight hours after coitus, either on account of discomfort or because defæcation might dislodge the cap, it is advisable first to douche the vagina thoroughly to ensure the destruction of all sperms.

The method most generally recommended, and in particular to clinic patients, is to insert the soluble pessary a few minutes before intercourse and subsequently to wait at least eight hours before extraction of the cap. If intercourse is repeated, an additional pessary should be used for each occasion and the eight-hour period must take effect from the last coitus. Should this occur in the morning before rising, the patient will require to wear the cap for the first eight hours of the day. With some

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women this is quite inoffensive, but with others considerable leakage is experienced. In such cases a diaper should be worn, or a small wick of cotton wool, inserted into the vaginal orifice, will effectively prevent leakage.

In cases where the cap is not comfortable in the upright position, or where for any reasons the patient dislikes its retention, she may use the alternative method of douching, and removing the cap when she rises.

Thus a combination of these methods can generally be found to meet individual preferences, and, provided the principles are explained to the patient, she is generally able to carry them out efficiently. The main points of the technique can conveniently be stressed by giving written instructions, and at many clinics these are printed, and given to each patient to keep for reference. In private practice it is possible to mention the variations of technique, but in clinic practice it is usual to adhere more strictly to one method. The following instructions are given at the Ealing Borough Council Clinic and can be taken as fairly representative:

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### INSTRUCTIONS FOR DUTCH (OR DUMAS) CAPS

Practice putting in the cap several times.

Wear it one night, but do not use it with your husband until you have been to the Centre again.

Come back next week wearing the cap.

After use, wash the cap with soap and water ; dry it ; if necessary press it back into shape.

Before putting in the cap, cover it with ointment, you can put it in any time in the evening, or leave it until you actually require it.

When you have connection with your husband, put in one of the gelatine suppositories, if possible a few minutes beforehand ; afterwards you must leave the cap in place at least eight hours before you pull it out.

Try not to wear the cap longer than sixteen hours without taking it out to wash it.

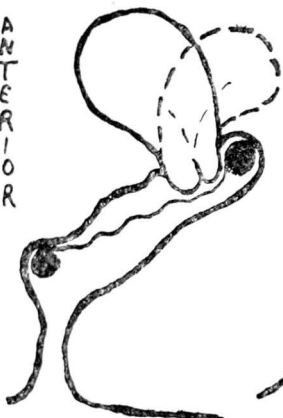
It is important to avoid constipation when you are using the cap.

Come to the Centre again in six months' time ; come sooner if you want more ointment or suppositories, or if you have any difficulty.

Always come wearing your cap.

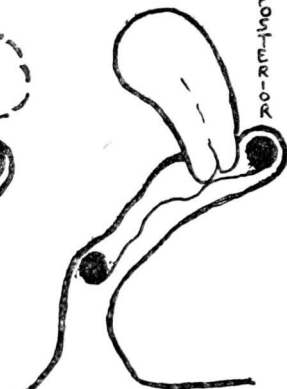
It must be reiterated that although these directions appear imposing on paper, the whole technique takes but a few moments to apply, and, once acquired, it becomes automatic and trivial to most women.

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Perfectly fitting Dutch Cap

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Adequately fitting  
Dutch Cap (reversed)



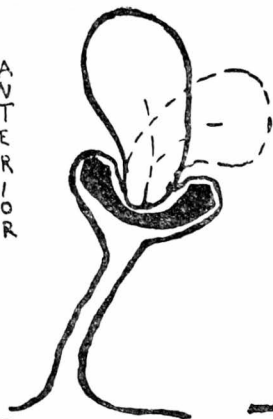
Dutch Cap incorrectly  
used.



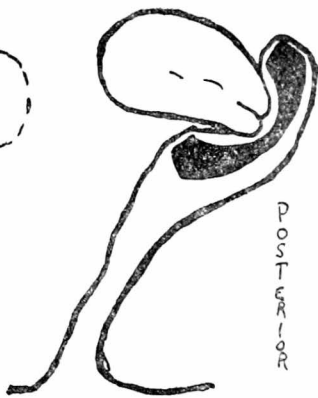
Dutch Cap which is  
too small.



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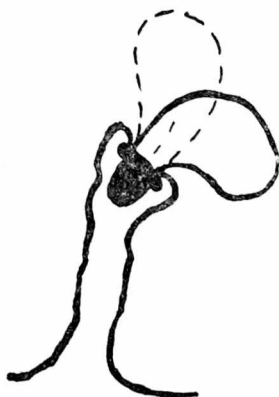


DUMAS CAP  
Perfectly fitting.

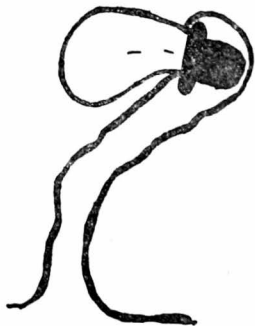


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DUMAS CAP  
Unsuitably chosen .



CERVICAL CAP  
Perfectly fitting



CERVICAL CAP  
unsuitably chosen

## CHAPTER VI

# THE DUTCH, DUMAS AND CERVICAL CAPS

### THE DUTCH CAP

This cap is the best choice for most women.

It consists of a circular watch spring covered by rubber which forms the rim of the cap, and across it is stretched a soft dome of rubber, the diaphragm.

The cap is made in eighteen sizes increasing by  $2\frac{1}{2}$  mm., the diameter of the smallest cap is 45 mm., and of the largest 90 mm.

There are several variations of these caps on the market. It is convenient to keep two types, one with a very pliable soft rim which can be used where the tone of the vaginal muscle is good, and another with a stiffer rim which will give more support to relaxed vaginal walls than the thinner one.

The cap is fitted obliquely across the vaginal

## THE PRINCIPLES OF CONTRACEPTION

passage, in the same way that a circular ring is used for prolapse. The back part of the rim lies in the posterior fornix, and the anterior part reaches to the back of the pubic bone and lies within an inch or two of the orifice of the vagina. Thus the cervix and most of the anterior vaginal wall are covered by the diaphragm of soft rubber. Usually the cap is inserted with the dome uppermost towards the cervix as the freer edge of the rim is convenient for extraction.

The size of the cap depends on the length of the vaginal passage and is generally greater in taller women. An average fitting for multiparous upper-class women might be about 75 to 80 millimetres, whereas 70 to 75 would be more usual among clinic patients. In cases of retroversion the distance from the pubic bone to the posterior fornix becomes shorter, and even a multiparous woman might then wear a cap between 50 and 60 millimetres in size.

It is customary to fit the *largest size which is comfortable to the patient*. With practice this measurement can be estimated roughly at once and the more correct fitting is postponed until

## DUTCH, DUMAS AND CERVICAL CAPS

the second attendance when the patient will have less tendency to vaginismus.

The suitability of a Dutch cap for any patient depends upon the shape of the vaginal cavity and the support which is afforded by the vaginal walls. In many women the vagina offers a small ridge above the pubic bone upon which the front rim of the cap will rest. This ridge is not likely to be present if the patient has a tendency to cystocele, and in some women the anterior vaginal wall slopes in such a way that there is no place suitable for the support of the cap. In general where the uterus is retroverted a Dutch cap can easily be worn, the front rim finding its place rather high up against the anterior vaginal wall.

In cases where the anterior vaginal wall offers little support for the rim of the cap (either on account of its shape or the presence of a cystocele), considerable experience is required to decide whether this cap is suitable or not. The examining finger will find that the rim drops in front and although this may not be uncomfortable for the woman, it is important to decide whether it can drop so much that

## THE PRINCIPLES OF CONTRACEPTION

the penis might possibly enter between the anterior vaginal wall in front and the cap behind. In such a case the cap should be discarded in favour of another type, or else a stiff-rimmed Dutch cap can be tried with the dome downwards. Used in the reversed position the cap has less tendency to sag downwards and occasionally patients with a slight degree of prolapse have found actual comfort from the support which such a cap can give. In doubtful cases the woman can be told that if she inserts the cap when she is already in bed the front rim will stay up sufficiently, but if she has been walking about since its insertion she should remember to push up the rim when she lies down.

It has been argued that a large Dutch cap with a stiff rim must inevitably tend to stretch the vaginal passage. It must be remembered that the vagina is not a hollow tube, but merely a potential cavity with the anterior and posterior walls lying in apposition. The cap lies flatly along this potential space and in this position does not stretch the vagina as it would if it lay across it at right angles. Occasionally a

## DUTCH, DUMAS AND CERVICAL CAPS

large cap with a stiff rim will cause discomfort to the vaginal walls, and some women can recognise an interference with muscular contraction during coitus. Occasionally discomfort is caused by a Dutch cap when the woman is in the upright position. The sensation, which is described as a vague aching or dragging pain, is caused by prolapsed or tender ovaries resting upon the cap, and it is relieved at once by recumbency. In such cases, if no alternative cap can be used, the patient should be instructed to douche and remove the cap directly she rises.

The accurate fit of these caps depends on the tone of the vaginal musculature and this is a factor which varies slightly from time to time. After a debilitating illness or after childbirth the cap should be refitted, and during the early months of marriage it may require refitting two or three times. If a patient is fitted at the time of marriage, it is advisable that she should return in three months and then again in six months ; after that it is probable, though not certain, that the fitting will be suitable until after childbirth.

## THE PRINCIPLES OF CONTRACEPTION

The patient may be surprised that the front rim of the cap is so near to the vaginal entrance, and may fear on this account that it will be noticeable to her husband. Actually this is not so, for the penis will go further backwards, towards the cervix, and it is only when the cap is too small that its rim is likely to cause discomfort to the husband.

It is not rare to find that a Dutch cap does not fit closely in front, but leaves a slight gap on either side of the pubic bone. This is no contra-indication to the use of the cap, for semen is not deposited against this part of the vagina. Often this imperfection is avoided by the use of a soft-rimmed cap, which will yield more readily to the irregularities of the vaginal wall.

In many instances the fitting of a soft-rimmed cap will be one or two sizes bigger than that of a stiff one. It is the preference of the writer to fit the softer caps whenever possible.

In cases of prolapse, where a supporting ring must be worn, it may be possible to fit a Dutch cap with a rim just slightly bigger than the ring itself. With a little care, the cap can

## DUTCH, DUMAS AND CERVICAL CAPS

be removed and replaced without any disturbance of the ring. It is said that the Dutch cap was originally made from a ring, with a sheet of condom rubber stretched across it as a diaphragm.

There is one other way of fitting a Dutch cap which requires mention, although it is but rarely employed. A small-size cap (generally 55-65 mm.) can be fitted into the vault of the vagina, in much the same way as a Dumas cap is used, except that with this cap the dome is collapsible and therefore cannot support itself in that position. The writer has found very few cases where this fitting seemed suitable, and it is not unknown for caps fitted in this way to drop out of the vagina during ordinary movement, such as walking. When a cap used like this is in place, it tends to lie vertically down the axis of the vagina, so that the examining finger (and therefore the penis) can choose equally to go below it or above it, i.e. on to the cervical side. The advantage of the method is that there is no chance of the cap pressing on the vaginal walls and the fact that the woman prefers the



## THE PRINCIPLES OF CONTRACEPTION

look of a small cap to a big one. Only one or two experts in this country employ this method, and some clinic statistics of small fittings yielded unsatisfactory figures.

The following are some points in favour of a Dutch cap :

For most women it is the easiest cap to use, being the quickest to adjust and extract.

Once placed correctly there is no risk of its becoming dislodged during coitus.

It allows free drainage from the cervix and is therefore suitable if there is any tendency to erosion.

The pool of semen in the posterior fornix is kept further away from the external os in this than in any other cap. This would give longer time for the chemical spermicides to act before the spermatozoa could reach the external os.

Some disadvantages are :

In some women it may cause discomfort if worn in the daytime. This is usually unnoticeable in the recumbent position.

Occasionally it may become dislodged by

## DUTCH, DUMAS AND CERVICAL CAPS

defæcation and very occasionally its fitting is imperfect when resting against a loaded rectum.

In a very small minority of women the most sentient part of the vagina is the anterior wall. Since the Dutch cap covers this part, sensation during coitus may be interfered with.

## INSERTION

The patient should be instructed to hold the dome of the cap in the hollow of her right hand. The rim is squeezed together between the thumb and first finger and supported thus against the vaginal orifice, while the left hand pushes the cap backwards along the posterior vaginal wall into the posterior fornix. The last part of the cap to disappear must be pushed well up behind the pubic bone.

In a fairly large proportion of cases the cervix lies in such a position that the cap can be pushed into the anterior fornix instead of the posterior one. To avoid this, the patient should remember to aim the cap *backwards* towards the rectum, not *upwards* towards the abdomen.

## THE PRINCIPLES OF CONTRACEPTION

It is most important that the patient should understand the difference between these two positions. It is best that she should check the position of the cap by feeling for the cervix with her index or second finger, and thus make certain that it is covered by the soft rubber of the dome. As it is not possible for all women to reach the cervix, the alternative guide is the position of the anterior rim of the cap. If the cap is correctly placed, the rim should be well up behind the pubis and comfortable if pushed on by the index finger. If incorrect, the anterior rim will be lower down, towards the entrance of the vagina, and usually very uncomfortable when pressed on. One of the risks of a small-fitting Dutch cap is that these signs become less marked, whereas with a big one the wrong position is generally uncomfortable, both for the wife and the husband.

In those cases where the cap has been wrongly inserted it is often possible to correct it by pulling the front rim half out, then pressing the extracted portion upwards towards the pubic bone. This will aim the posterior rim in a more backward direction, and if the cap is

## DUTCH, DUMAS AND CERVICAL CAPS

pushed in at this angle it may adjust itself correctly. For correction in this way a stiff-rimmed cap will be better than a soft one which is too yielding. It is not unusual for a woman to find that there are certain days in the monthly cycle when the cap is more difficult to insert than others. Usually these are shortly before or after the menstrual period. It appears that the uterus lies lower than usual at this time, hence the tendency for the anterior fornix to be more accessible than the posterior fornix.

This mistake is the only one a woman is likely to make when using the Dutch cap, and until she is entirely accustomed to the method she should attempt always to locate the cervix and to make sure that it is covered by rubber on every occasion.

The extraction of a Dutch cap is generally easy. The index finger should hook down the anterior rim, pressing it against the back of the pubic bone. An alternative method is to extract the anterior rim by gripping it between the tips of the index and second fingers.

When the thicker type of Dutch cap is used

## THE PRINCIPLES OF CONTRACEPTION

the rim may be found to be slightly out of the circle after its withdrawal. It should be pressed back into a circle after it has been washed and dried.

### DUMAS CAP

This cap is intended to fit into the vault of the vagina, reaching from the anterior to the posterior fornix, and covering over the cervix, which must of necessity be small or shallow.

Since the dome of the cap is stiff, it is supported from below by the bulging in of the vaginal walls, and in some instances it adheres to the vaginal vault by suction. The Dumas is considerably smaller than the Dutch cap and is made of thick, unyielding rubber at the edges, but thinner rubber in the centre of the dome. Three sizes are used, small, medium and large.

In general, this cap is unsuitable where the cervix is large or pointed, as the dome is not deep enough to contain any but a flattish cervix. It should not be worn over a cervix which is pointing backwards or is even at right angles to the axis of the vagina, for in these

## DUTCH, DUMAS AND CERVICAL CAPS

instances the cap is liable to become dislodged by the penis.

In all cases, it is necessary for the woman to come wearing the cap before the fitting is passed as correct, for a spasm of the vaginal muscles may make this cap appear an excellent choice, whereas subsequent relaxation may leave it totally unsupported.

Some points in favour of the Dumas cap are as follows :

It is particularly suitable for cases of prolapse with cystocele, rectocele, or both.

Less of the vaginal surface is covered by this than by a Dutch cap.

Discomfort is very seldom caused to the woman by this cap, even when worn in the upright position, but occasionally the stiffness of the dome causes complaint from the husband.

Some disadvantages are :

Often it is difficult to extract.

Its fitting against the vaginal walls is generally less secure than that of the Dutch cap.

## THE PRINCIPLES OF CONTRACEPTION

### INSERTION

The patient is instructed to squeeze the sides of the cap together with the hollow facing upwards, and to push it thus into the vaginal orifice. The anterior part of the cap is then pressed upwards until it moves into the anterior fornix, the back part automatically passing over the cervix into the posterior fornix. It is necessary that the patient should feel round the vault of the vagina, to make sure that the cervix is not uncovered.

Extraction of this cap is best effected in the kneeling position, by dislodging it from the fornix with the right index finger hooking down the left posterior quadrant of the cap. Once the cap is dislodged, it can be pulled out quite easily by the finger.

### CERVICAL OR "PRORACE" CAP

This cap is designed to fit on to the cervix itself, and is independent of support from the vaginal walls. Its fame has been made world wide by Dr. Marie Stopes, who has advocated its use for many years.

## DUTCH, DUMAS AND CERVICAL CAPS

Five sizes are supplied, 0, 0½, 1, 2 and 3. They can be supplied with a small tag to facilitate extraction, but in most cases this is unnecessary. Since its position does not depend on the vaginal musculature—which is a variable factor—there is little likelihood that a refitting of the cap will become necessary until after childbirth.

This cap can only be chosen when there is a well-formed cervix, with no tear reaching to the base of the cervical tissue. As with the Dumas, it is contra-indicated if the axis of the cervix is at right angles to the vagina, as it is then liable to be dislodged by the penis. It is most suitable where the uterus is retroverted and the cervix presents in the axis of the vagina.

The cap is not intended to fit the cervix exactly. The dome should extend further than the cervix, this surplus being for the reception of the cervical and uterine secretion. Occasionally where the cervix is shallow, this surplus may be excessive and tend to cause displacement of the cap by the penis. In such a case, the same cap can be fitted, but obtained with a more shallow dome.



## THE PRINCIPLES OF CONTRACEPTION

It is sometimes possible to fit a cervical cap in two ways ; if the cervix is conical in shape, a small cap may be fitted half-way up and tightly pressed on to the cervix, or a larger one may be fitted further up, at the base of the cone.

The physical effects of this cap have been much discussed. Theoretically, one would expect that a rim tight enough to grip on to the slippery conical surface might interfere with the blood supply to the part. This is certainly so on occasion, for after removal of a cap, a temporarily constricted ring on the cervix has been observed both by a patient and the physician. Nevertheless, cervices which have been treated in this way for many years can be found to be in perfectly healthy condition. In general a cap gripping at the root of the cervix with an ample surplus of dome, is likely to be the more innocuous.

A curious phenomenon may often be observed with these caps. When they are first placed over the cervix, the fit is found to be loose and the cap can readily be dislodged. Within an hour or two, this is not so, and the cap is evidently adhering tightly by suction. On this

## DUTCH, DUMAS AND CERVICAL CAPS

account, it is best for the patient to place the cap in position some time before she requires to use it. It is evident that this is a tiresome detail associated with the use of these caps, and it is not invariably observed, nor requested by all authorities.

In spite of the fact that the cap adheres tightly, it can allow excessive secretion from inside to escape round the edges. Thus a patient has been known to forget about the cap, to have a normal menstrual period and to find the cap still in place afterwards, apparently with no ill effect resulting.

An additional precaution for use with this cap has become popular and is particularly advisable when the cap has not been inserted some while before coitus. The dome of the cap is half filled with spermicidal ointment and when the cap is in place the dome is pressed on to the cervix by the index finger. This ensures that the ointment has worked well up the sides of the cap, and may possibly cause plugging of the os with the spermicide.

Some points in favour of the cervical cap, are as follows :

## THE PRINCIPLES OF CONTRACEPTION

It takes up less room than any other cap, and leaves the maximum exposure of the vaginal walls.

It is the only cap that a woman can buy for herself with any chance of getting a correct fit.

It is hardly ever uncomfortable to use.

It may sometimes be employed in cases of prolapse, where a supporting ring must habitually be worn.

### *Some points in its disfavour :*

It is very difficult for some women to adjust.

Unless this type of cap is entirely suitable, it is liable to be dislodged from the cervix during coitus.

The cervical secretion is retained within the cap, which is inadvisable if there is a tendency to cervicitis.

## INSERTION

The cap is held by the patient between two fingers and inserted with the hollow facing upwards. Once inside the vagina it is pushed up until it reaches the cervix and encloses it.

## DUTCH, DUMAS AND CERVICAL CAPS

The cervix should always be located bulging through the surplus rubber of the dome.

When the cap is to be removed, the patient should attempt to hook off the rim by the tip of her finger, rather than pull on the dome, or the tag which is attached to some caps. It is believed by some that prolapse and retroversion may be caused in women who repeatedly subject the cervix to a strong pulling action. In any case, the suction can usually be released first by the finger before extraction of the cap.

A modification of the cervical cap should be mentioned here, although its use is not generally to be recommended. It has been the custom on the Continent for women to be fitted with small metal caps—much like a thimble—which are placed on to the tip of the cervix, and adhere there by suction. The cap is usually inserted by the physician at the end of menstruation, and displaced by the patient herself when the period begins. The practice appears most questionable, and metal caps are little employed in this country. The writer has seen a Viennese woman who had used the method

successfully for twelve years and who presented a healthy cervix.

A modification of this cap, made of celluloid and shaped like a small bowl is being used in Russia. A colleague who has seen this method in practice was surprised to see that the cervixes were on the whole remarkably healthy. It is there the custom for women to attend the factory clinic weekly by appointment and for the physician in charge to remove the cap and apply another sterilised one in its place. The success thus obtained seems to be about the same as with the ordinary removable occlusive cap.

One further method remains to be mentioned—the use of a vaginal sponge in lieu of an occlusive cap. It has been taught that this method is easy for a woman to apply herself, and that she should in addition soak the sponge in some spermicidal solution. In actual fact, even when chosen and fitted by an expert, a sponge will seldom prove a satisfactory method of occluding the cervix. When a small sponge is chosen, the stretching of the vagina, combined with the coital movements,

## DUTCH, DUMAS AND CERVICAL CAPS

tend inevitably to dislodge it into one of the fornices. If a sponge is chosen which is too big to be dislodged, it will almost invariably cause dyspareunia to both partners.

It is probable that even an indifferently fitting cap would be likely to give better protection than a sponge, so that the medical indications for this appliance would be very limited.

## APPENDIX

## THE BIRTH CONTROL MOVEMENT, SOCIETIES AND CLINICS

**T**HE FOLLOWING are the birth control organisations in this country :

1. **THE NATIONAL BIRTH CONTROL ASSOCIATION**, 26 Eccleston Street, S.W.1, with which is incorporated the Birth Control Investigation Committee. Lord Horder, K.C.V.O., M.D., F.R.C.P., is President of the Association, and Lady Denman, D.B.E., Chairman of the Executive Committee ; Sir Humphry Rolleston, Bart., G.C.V.O., K.C.B., M.D., F.R.C.P., is Chairman, and Dr. C. P. Blacker, M.D., M.R.C.P., Secretary of the Birth Control Investigation Committee.
2. **THE SOCIETY FOR CONSTRUCTIVE BIRTH CONTROL**, 108 Whitfield Street, W.1, of which Dr. Marie Stopes, D.Sc., is President.
3. **THE SOCIETY FOR THE PROVISION OF BIRTH CONTROL CLINICS**, 153a East Street, Walworth, S.E.17, of which Lord Gerald Wellesley is Chairman, and Mrs. Evelyn Fuller, Secretary. The Society is represented on the governing body of the National Birth Control Association.
4. **THE BIRTH CONTROL INTERNATIONAL INFORMATION CENTRE**, Parliament Mansions, Orchard Street, S.W.1, of which Mrs. Margaret Sanger is President, and Mrs. Edith How-Martyn, M.Sc., is the Honorary Director. The Centre is represented on the governing body of the National Birth Control Association.



## APPENDIX

The first birth control clinic in this country was opened in 1921 by Dr. Marie Stopes. Three clinics are now working under her direction ; they give advice free of charge to married women, and two of them are open all day (see list). Women attending these clinics are ordinarily seen and instructed by a certified midwife, who can refer patients to a doctor if she thinks fit. Courses of tuition and demonstrations are arranged, particulars of which may be obtained from the Society for Constructive Birth Control, 108 Whitfield Street, W.1.

There are now over forty other voluntary clinics in England and Scotland. Some of them are run by local branches of the National Birth Control Association, and all are affiliated to the Society for the Provision of Birth Control Clinics. At all of these clinics the patient is seen by a doctor. Any married woman is eligible for advice, a nominal charge of 1s. being made if she is able to pay. Contraceptive appliances are sold at very low rates, or are given free in necessitous cases.

All such clinics are maintained by voluntary support. Many people who can themselves afford to pay for contraception desire to help others to obtain this benefit. There are still classes of society where this knowledge is utterly inaccessible.

At two of the largest clinics, lectures and courses of practical tuition are held for post-graduates, undergraduates and nurses. Particulars of these may be obtained from the Secretaries at the Walworth Women's Welfare Centre, 153a East Street, S.E. 17, and at the North Kensington Women's Welfare Centre, 12 Telford Road, W.10.

Two of the London clinics have gynæcological sessions, to which patients who are unable to be treated by their own medical practitioners may be referred (see list). Minor disorders, such as cervicitis or prolapse, are treated here, with much less delay than at the hospital

## APPENDIX

out-patient department. These gynæcological sessions are of great benefit to busy working-class mothers, but at present lack of funds is limiting their proper development.

Within the terms of three circulars issued by the Ministry of Health (Memo. 153/M.C.W. of 1930 ; Circular 1208 of 1931 ; and Circular 1408 of 1934) it is permissible for Local Authorities to provide advice on contraception for married women to whom pregnancy would be detrimental to health. What is or is not detrimental to health is a matter for the Medical Officer in charge of the clinic to decide.

Whether contraceptive advice is available in any particular area, and upon what terms it may be given, depends upon the decision of the Local Authority. Particulars of the service can be obtained from the local Medical Officer of Health.

Out of 1,200 Local Authorities, about 120 (10 per cent) have at present taken some steps to carry out the provisions sanctioned by the Ministry of Health. Either they have instituted contraceptive clinics in association with the Maternity and Child Welfare Centres, or they have started gynæcological clinics, where contraceptive advice is given, or they have arranged to lend or hire premises to voluntary clinics, or to refer patients to private doctors or voluntary clinics, usually paying a capitation fee for each patient.

It is unfortunate that so large a proportion of Local Authorities has neglected to provide the service. This neglect is due partly to inertia, and partly to local opposition, mainly from Roman Catholic sources. Although no Catholic woman need avail herself of contraceptive service, the Catholics maintain that birth control clinics should not be supported by the public rates. If minorities were usually allowed to dictate in this way, we might well have the misogynists refusing to pay rates which support antenatal and maternity services !

## APPENDIX

The following list will be of guidance to practitioners who wish to refer patients to local clinics. Other boroughs are continually being added to the list, and up-to-date information can always be obtained from the National Birth Control Association, 26 Eccleston Street, S.W.1.

LIST OF  
VOLUNTARY BIRTH CONTROL CLINICS  
(PREVIOUS LISTS CANCELLED)  
MAY 1935

*(All clinics on this list are under medical supervision, but at those marked with an asterisk patients are normally advised by a certificated midwife)*

LONDON

EAST LONDON WOMEN'S WELFARE CENTRE, 6 Burdett Road, Stepney, E.3. Mondays and Wednesdays, 2.30-4 p.m.

GOSWELL WOMEN'S WELFARE CENTRE, 39 Spencer Street, Goswell Road, E.C.1. Mondays, 6.30-8 p.m.  
GYNÆCOLOGICAL CLINIC: Fridays, 7.30 p.m.

LAMBETH WOMEN'S WELFARE CENTRE, 53 Ethelred Street, S.E.11. Wednesdays, 6.30-8 p.m.

\*MOTHERS' CLINIC, 108 Whitfield Street, Tottenham Court Road. Daily (except Saturdays), 10 a.m.-6 p.m.

NORTH KENSINGTON WOMEN'S WELFARE CENTRE, 12 Telford Road, Ladbroke Grove, W.10. Mondays and Fridays, 2.30-4 p.m.; Tuesdays and Wednesdays, 6.30-8 p.m.

GYNÆCOLOGICAL CLINIC: Thursdays and Fridays, 2.15-3.30 p.m.

WALWORTH WOMEN'S WELFARE CENTRE, 153a East Street, S.E.17. Tuesdays and Fridays, 2.30-4 p.m.; Thursdays, 6.30-8 p.m.

WILLESDEN (opening shortly).

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### PROVINCES

**ALDERSHOT & DISTRICT WOMEN'S WELFARE CENTRE**, Grosvenor Road, Aldershot. 1st and 2nd Tuesdays, 8 p.m.

**ASHINGTON & DISTRICT BIRTH CONTROL CLINIC**, United Methodist Chapel Schoolroom, Ashington, Northumberland. Apply to Secretary.

**BASINGSTOKE MOTHERS' CLINIC**, Castons Road, Market Square, Basingstoke, Hants. 1st and 3rd Fridays, 2.30-4 p.m.

**BIRKENHEAD MOTHERS' WELFARE CLINIC**, 11a Oxton Road, Birkenhead. Thursdays, 6-7 p.m.

**BIRMINGHAM WOMEN'S WELFARE CENTRE**, 22 Masshouse Lane, nr. Moor Street, Birmingham. Tuesdays, 7.30-9 p.m. ; Thursdays, 2.30-4 p.m.

**BRISTOL WOMEN'S WELFARE CENTRE**, Salford Hall, St. James Barton, Bristol. Fridays, 10-12 noon.

**CAMBRIDGE WOMEN'S WELFARE ASSOCIATION**, 22 Parsonage Street, Cambridge. Wednesdays, 3-5 p.m.

**CANNOCK WOMEN'S WELFARE CENTRE**, 138 Church Hall, Hednesford, Staffs. Last Thursday in month, 2-4 p.m.

**DAGENHAM & DISTRICT BIRTH CONTROL CLINIC**, The Clinic, Becontree Avenue. 2nd and 4th Thursdays, 7-9 p.m.

**DERBY MOTHERS' CLINIC**, Maternity and Child Welfare Rooms, Nightingale Road (Amber Street Entrance). 2nd and 4th Thursdays, 7.30-8.30 p.m.

**DEVON (NORTH) WOMEN'S WELFARE & ADVICE CENTRE**, 113 Boutport Street, Barnstaple. 3rd Tuesday, 2-4.30 p.m.

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EXETER & DISTRICT WOMEN'S WELFARE ASSOCIATION,  
The Dispensary, Queen Street, Exeter. Fridays,  
2.15-5 p.m.

GREENWICH WOMEN'S WELFARE ASSOCIATION, 118 Wool-  
wich Road, nr. Westcombe Hill, S.E.10. Thursdays;  
2.30-4 p.m.

GRIMSBY WOMEN'S WELFARE, Watkin Street, Grimsby.  
Mondays, 2.30-4 p.m.

GUILDFORD WOMEN'S WELFARE CENTRE, 6 Stoke Road,  
Guildford, Surrey. 1st and 2nd Wednesdays, 5.30 p.m.

HALIFAX WOMEN'S WELFARE CLINIC, 32 Clare Road,  
Halifax. 2nd and 4th Wednesdays, 7-8.30 p.m.

\*LEEDS MOTHERS' CLINIC, 68 Bellevue Road, Leeds.  
10-6 p.m. daily.

LIVERPOOL MOTHERS' WELFARE CLINIC, 23 Clarence  
Street, off Mt. Pleasant, Liverpool 3. Mondays, 10.30-  
11.30 a.m. ; Wednesdays, 2-3 p.m. ; Fridays, 6.30-  
7.30 p.m.

BRANCH at Community Hall, Townsend Avenue,  
Norris Green, Liverpool 11. Mondays, 2-3 p.m.

MANCHESTER, SALFORD & DISTRICT MOTHERS' CLINIC  
FOR BIRTH CONTROL, 123 Greengate, Salford (entrance  
Garden Lane). Thursdays, 3 p.m. and 7.30 p.m.

NEWCASTLE WOMEN'S WELFARE CENTRE, 670 Scotswood  
Road, Newcastle-on-Tyne. Tuesdays and Thursdays,  
2.30-4 p.m.

NORTHAMPTON WOMEN'S WELFARE ASSOCIATION, Dy-  
church Lane, Northampton. 3rd Tuesdays, 6.30-  
8.30 p.m.

\*NORWICH MOTHERS' CLINIC, 17 Pitt Street, Norwich.  
Tuesday, 3-4 p.m.

## APPENDIX

NOTTINGHAM WOMEN'S WELFARE ASSOCIATION, 15 Market Street, Nottingham. Thursdays, 6-8.30 p.m.

OXFORD FAMILY WELFARE ASSOCIATION, 4 King Street, Jericho, Oxford. Wednesdays, 2.30-4 p.m. (Women). Men : by appointment.

PLYMOUTH MOTHERS' ADVICE CENTRE, Beaumont Welfare Centre, Beaumont Park, Plymouth. Tuesdays, 6.45-9 p.m.

SALISBURY MARRIED WOMEN'S ADVISORY CLINIC, 49 High Street, Salisbury. 1st and 3rd Thursdays, 2-4 p.m.

SHEFFIELD WOMEN'S WELFARE CLINIC, Attercliffe Vestry Hall, Attercliffe Common, Sheffield 9. Tuesdays, 6.30-8 p.m.

SLOUGH & DISTRICT MARRIED WOMEN'S ADVISORY CLINIC, 272 Farnham Road, Slough. 1st and 3rd Wednesdays, 2.30-4 p.m.

STAFFORDSHIRE & DISTRICT WOMEN'S WELFARE CENTRE, 62 Heath Street, Heath Town, Wolverhampton. 1st Wednesday, 2-4 p.m.

SUNDERLAND WOMEN'S ADVISORY CLINIC, 46 John Street, Sunderland. 2nd and 3rd Wednesdays, 2.30-4 p.m.

WINCHESTER & DISTRICT MARRIED WOMEN'S ADVISORY CLINIC, 4 The Square, Winchester. 2nd and 4th Thursdays, 2-3.30 p.m.

## SCOTLAND

ABERDEEN WOMEN'S WELFARE CENTRE, 4 Gerrard Street, Gallowgate, Aberdeen. Wednesdays, 3-5 p.m.

EDINBURGH MOTHERS' WELFARE CLINIC, The Dispensary, 21 Torphichen Street, Edinburgh. Tuesdays, 6.30-8 p.m. ; Fridays, 2-3 p.m.

## APPENDIX

GLASGOW WOMEN'S WELFARE & ADVISORY CLINIC,  
123 Montrose Street, Glasgow, G. 4. Tuesdays,  
7-8 p.m. ; Thursdays, 3-4 p.m.

GREENOCK, THE BIRTH CONTROL CLINIC, MATERNITY &  
CHILD WELFARE CENTRE, Terrace Road, Greenock.  
Mondays, 7.30-8.30 p.m.

PAISLEY MOTHERS' CLINIC, Bank Street, Co-operative  
Hall, Paisley. Tuesdays, 7-8 p.m.



**ACTION TAKEN BY LOCAL AUTHORITIES  
UNDER MEMORANDUM 153/MCW.**

**MAY 1935**

**C.B.** = County Borough.

**C.C.** = County Council.

**MET.B.** = Metropolitan Borough.

**M.B.** = Municipal Borough.

**U.D.C.** = Urban District Council.

**R.D.C.** = Rural District Council.

1. The following Local Authorities have established special sessions or clinics, usually in connection with Maternity and Child Welfare Centres.

Aberavon & Port Talbot	Halifax C.B.
M.B.	Harrow U.D.C.
Aberdare U.D.C.	Leicester C.B.
Barrow-in-Furness C.B.	Lincoln C.B.
Bath C.B.	Llantrisant R.D.C.
Batley M.B.	Mexborough U.D.C.
Bethnal Green Met. B.	Monmouthshire C.C.
Bournemouth C.B.	Mountain Ash U.D.C.
Brighton C.B.	(3 clinics)
Chelmsford M.B.	Norwich M.B.
Cheltenham M.B.	Ogmore & Garw U.D.C.
Colwyn Bay U.D.C.	Pontypridd U.D.C.
Crewe M.B.	Reigate M.B.
Dewsbury M.B.	Rotherham C.B.
Ealing M.B.	Shoreditch Met. B.
Essex C.C. (2 centres)	Stoke Newington M.B.
Gellygaer U.D.C.	Wakefield City C.
Gillingham M.B.	West Riding (2 centres)
Gloucester City C.	York C.B.
Grimsby M.B.	

2. The following have set up gynæcological clinics at which birth control advice is given.

Barry U.D.C.

Bristol C.B.

Croydon M.B.

Durham C.C.

## APPENDIX

Hull M.B.	St. Helens C.B.
Leeds C.B.	Sunderland M.B.
Manchester C.B. (2 clinics)	Tilbury U.D.C.
Oxford City and C.B.	Walthamstow M.B.
Penarth U.D.C.	West Bromwich C.B.
	West Riding C.C.

3. The following refer cases to voluntary and municipal clinics or private doctors, paying a fee.

Aldershot M.B.	Kensington Royal Borough.
Ashington U.D.C.	Leicester C.C.
Banbury M.B.	Newburn, etc., U.D.C.
Bedlington U.D.C.	Newcastle City C.
Buckinghamshire C.C.	Lytham St. Annes M.B.
Cambridge M.B.	Northampton C.C.
Dagenham U.D.C.	Northumberland C.C.
Denbighshire C.C.	Nottingham City C.
Devon C.C.	Paddington Met. B.
Edmonton U.D.C.	Rochdale C.B.
Exeter C.B.	Salford M.B.
Glyncorrgw U.D.C.	Southall U.D.C.
Greenwich Met. B.	Sussex (West) C.C.
Hants C.C.	Swinton M.B.
Hove M.B.	West Ham C.B.

4. The following have authorised their Medical Officers to give advice but have started no special clinics.

Barnes M.B.	Hartlepool M.B.
Blyth M.B.	Heston & Isleworth U.D.C.
Christchurch M.B.	Hornsey M.B.
Darlington M.B.	Ilkley U.D.C.
Dover M.B.	Keighley M.B.
Enfield U.D.C.	Loughborough M.B.
Flintshire C.C.	Mansfield M.B.
Gloucestershire C.C.	

## APPENDIX

Mansfield Woodhouse U.D.C.	Royton U.D.C.
Market Harboro' U.D.C.	Sevenoaks U.D.C.
Marylebone Met. B.	Somerset C.C.
Merton and Morden U.D.C.	Southampton C.B.
Middlesbrough C.B.	South Shields C.B.
Oldham C.B.	Stoke-on-Trent C.B.
Paignton U.D.C.	Teddington U.D.C.
Portsmouth M.B.	Warwickshire C.C.
Ramsgate M.B.	Westminster Met. B.
Retford (East) M.B.	Wombwell U.D.C.
	Worcestershire C.C.
	Worthing M.B.

5. The following have decided to give advice and are either now considering schemes or have not yet taken steps to put the decision into effect.

Birmingham C.B.	Kendal M.B.
Blackpool C.B.	Merthyr Tydfil U.D.C.
Caerphilly U.D.C.	Poplar Met. B.
Canterbury C.B.	Rhondda U.D.C.
Dartford M.B.	Sussex (East) C.C.
Doncaster C.B.	Twickenham M.B.
Gateshead C.B.	Wembley U.D.C.
Hammersmith Met. B.	West Hartlepool C.B.
Hebburn U.D.C.	

6. The following have either lent or hired the premises of a Maternity and Child Welfare Centre to a local branch of the National Birth Control Association, or similar body, for use as a voluntary birth control clinic.

Aldershot M.B.	Hants C.C.
Ashington U.D.C.	Northampton C.B.
Barnstaple M.B.	Plymouth C.B.
Cambridge M.B.	Sheffield M.B.
Dagenham U.D.C.	Willesden M.B.
Derby C.B.	Winchester M.B.
Guildford M.B.	

## CONTRACEPTIVES AT PRESENT RECOMMENDED (MAY 1935)

CONDOMS. Prentif Ltd., 21 Green Street, W.C.2. 6*d.*  
each (plain or teat ends).

WASHABLE SHEATHS. Prentif Ltd., 21 Green Street,  
W.C.2. 1*s.* 6*d.* each (light weight, medium size).  
Large and small sizes are very occasionally required.

DUTCH CAPS. Lamberts, 60 Queens Road, E.8. 5*s.* each  
(soft rim or stiff rim).

DUMAS CAPS. Lamberts, 60 Queens Road, E.8. 7*s.* 6*d.*  
each.

CERVICAL CAPS. ("Prorace") Lamberts, 60 Queens  
Road, E.8. 3*s.* 6*d.* each (light rubber, with or with-  
out tag ; or with shallow dome).

SPERMICIDAL OINTMENT for use with Occlusive Caps

"G.P." OINTMENT. Gilmont Products Ltd., Tileyard  
Road, N.7. 1*s.* 6*d.* a tube.

This bland, odourless ointment is non-greasy. It  
should be spread thickly over the cervical surface of  
the cap. It will keep well in any climate.

SPERMICIDAL SOLUBLES

(1) GLYCERINE-GELATINE BASE

"G.P." SOLUBLES. Gilmont Products Ltd., Tileyard  
Road, N.7. 2*s.* for a box of twelve.

These are unsuitable in hot climates.

## APPENDIX

### (2) DRY FOAMING TABLETS (see page 70)

SPETON. Coates & Cooper Ltd., 94 Clerkenwell Road, E.C.1. 3s. 6d. a tube of twelve.

SEMORI. Medical Laboratories, 40 Pall Mall, S.W.1. 5s. a tube of twelve.

Both of these products can be kept in any climate if properly corked. They are fairly widely available in foreign countries. They are German products.

### JELLIES

for use alone if necessary (see page 72), or with Occlusive Cap, or Sheath

PERMFOAM. Gilmont Products Ltd., Tileyard Road, N.7. 5s. for a box of six.

MILSAN. Menosine Ltd., 24 Maple Street, W.1. 4s. 6d. for a box of six ; 7s. 6d. for a box of twelve.

The relative spermicidal merits of these are still *sub judice*. Milsan is the more easy in application ; possibly Permfoam is the more spermicidal.

### LUBRICANT

K.Y. JELLY. Johnson & Johnson, Slough, Berks. 1s. 3d. retail for 2-oz. tube.

This is a bland, odourless, non-greasy lubricant. Its spermicidal properties are negligible.

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Nearly all the manufacturers on this list make very considerable reductions in price to clinics.

These preparations can be obtained direct from the makers, or ordered through any retail chemist throughout the country. Patients sending for preparations from abroad should remember that contraceptives are officially forbidden in S. Ireland, in Germany, France and Italy, and, except under medical authority, in U.S.A. In these countries condoms may be sold, but officially "for the avoidance of venereal disease."

## BIBLIOGRAPHY

*Clinical Contraception.* By Gladys M. Cox, M.B., B.S. Heinemann. 7s. 6d.

This valuable work was written on the suggestion of the National Birth Control Association.

*Biological and Medical Aspects of Contraception.* Edited by Margaret Sanger. National Committee on Federal Legislation for Birth Control, Inc., Washington, D.C. \$1.00.

Includes an interesting survey of the work of Ogino and Knaus.

*Control of Conception, The.* By R. L. Dickinson and L. S. Bryant. Baillière, Tindall & Cox. 24s.

*Chemistry and Physics of Contraception, The.* By C. I. B. Voge. Jonathan Cape. 12s. 6d.

*Reports of the International Medical Group for the Investigation of Contraception.* Birth Control Investigation Committee, 26 Eccleston Street, S.W.1.

*Parenthood: Design or Accident.* By Michael Fielding. Williams & Norgate. 3s. 6d.

The best account of the practice of birth control for the general lay reader.

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