

**MEDICAL
ASPECTS OF CONTRACEPTION**

REPORT AND EVIDENCE

MEDICAL ASPECTS OF CONTRACEPTION

*Being the Report of the Medical Committee appointed
by the National Council of Public Morals in
connection with the investigations of
the National Birth-rate
Commission*

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PREFATORY NOTE

THE National Council of Public Morals, which has for its objects the promotion of the moral and physical regeneration of the race, established in 1913, with official recognition, an enquiry which became known as the National Birth-rate Commission. The Commission was composed of sixty recognised authorities in religion, science, statistics, economics, and education; it took evidence from a large number of experts, and in 1916 presented its first Report to the late Lord Long, then President of the Local Government Board, who said on receiving the Commission :

“ My first duty, and a very great privilege it is, is, on behalf of the Government and on behalf—may I for a moment voice something much wider and much larger than the Government?—on behalf of society and the country, to thank your Commission for the splendid work which you have done. . . . I am confident that if you have done nothing else, and I think you have done a great deal more, you have stirred the minds and hearts of men and women in so profound a way that even the most careless, the most indifferent, cannot be deaf to your entreaties or regardless of your suggestions. . . . If the need for work of this kind were great before, it is ten times

greater now that this war has come. I hope that the important remark made to us a moment ago may be appreciated by the people of this nation throughout its length and breadth—namely, that true patriotism and true devotion to public service are not to be found merely in the performance of those splendid feats of arms which have won the gratitude of our hearts and which have won our undying admiration, but they are also to be found in those quieter, less glorious, but none the less valuable services which we can, if we will, in our time and generation render to the State.”

Now, in that Report ¹ the question of family restriction was put before the Commission at considerable length by expert witnesses, and their evidence and examination were published in full. The Report was extensively reviewed in the Press of Great and Greater Britain, America, and in most Continental countries, and aroused great interest in the Churches. It went out practically to the ends of the earth. One typical review may be quoted: *The New Statesman* (Dr. Sidney Webb) said that “The National Council of Public Morals has done a great public service. The Commission has produced the most candid, the most outspoken, and the most impartial statement that this country has yet had as to the extent, the nature, and the ethical character of the voluntary regulation of the marriage state which now prevails over the greater part of the civilised world.” In that Report there was a special section dealing with the moral and religious aspects of Birth Control, and the views of representative

¹ Published under the title of “The Declining Birth Rate, its Causes and Effects.”

members of the Established Church, the Catholic Church, the Free Churches and the Jewish community were published. In an "addendum" to the Report, drawn up by the Rev. Principal A. E. Garvie, D.D., and signed by twenty-four of the members of the Commission, it was urged that—

"The following are some of the questions which deserve more thorough and general consideration than we have been able to give to them :

(1) Is parenthood the only valid reason for marital relations ?

(2) What motives justify the restriction of the family ?

(3) Is any mode of restriction except voluntary abstinence from marital relations moral and religious ?

(4) How would such voluntary abstinence affect the health, comfort, and happiness of the relations of husband and wife ? "

From the issue of that Report, the National Council has been more or less the centre of organised investigation into the various aspects of the complex problem of Birth Control. And various members of the Commission—amongst whom were Sir Arthur Newsholme (then the Principal Medical Officer of the Local Government Board, who with Dr. T. C. Stevenson, the Superintendent of Statistics, were appointed by their respective Government departments to serve on the Commission), Dr. Mary Scharlieb, Lady Barrett, and others—armed with

the expert information gained at its board, have written books on the subject which have still further aroused public opinion upon this urgent and almost world-wide problem.

The Commission was reconstituted in 1917, and devoted three more years to further investigation into problems of population and parenthood, and in 1920 presented its second Report to the Rt. Hon. C. Addison, M.P., then Minister of Health. This further Report occupied a volume of 450 pages, and had a very large circulation, and also dealt with the problem of Birth Control. Again in 1921 the National Council appointed, as the Ministry of Health decided it would be better to have an independent inquiry, a special Committee on "The Prevention of Venereal Disease" with a view to bringing together the divided forces attacking these dire evils. The subject of Birth Control came again into the discussion of these vital matters. And later in 1921 the National Council reconstituted the Commission a third time to deal with a further problem of the "Development and Education of Young Citizens for Worthy Parenthood," and its third Report, under the title of "Youth and the Race," a volume of 378 pages, was presented to the Ministry of Health and the Board of Education jointly. During the third investigation we were, as before, brought up against the recurring question of Birth Control, and in particular we were urged on all sides to follow up the work of our first Commission and to give some guidance to Christian people who were sorely perplexed about their duty and responsibility in this regard. The National Council accordingly

appointed, in continuation of its previous investigation, a special Committee "to consider the Ethical Aspects of Birth Control from the point of view of Christian people." The President of the National Council, the Lord Bishop of Winchester, who, as Bishop of Peterborough, had served on the previous Commission, became the President of this Birth Control Committee. The Report was published in May 1925 and was extensively reviewed in the Press at home and abroad.

Soon after a Medical Committee was appointed to consider the medical aspects of contraception. The terms of reference and the members are given on pp. xv-xvi. We regret to state that Dr. Letitia D. Fairfield had to resign after six meetings owing to pressure of professional work.

The Committee has held eighteen meetings and has had the benefit of statements and evidence from F. H. A. Marshall, Sc.D., F.R.S.; Robert L. Dickinson, M.D.; Miss Gertrude Sturges, M.D.; Mrs. G. M. Cox, M.B., B.S.; Mrs. Alice L. L. Robson, M.B., C.M.; Mrs. C. S. S. Winter, M.B., Ch.B.; T. A. Webster, M.A.; C. Killick Millard, D.Sc.; Binnie Dunlop, M.B., Ch.B.; Norman Haire, Ch.M., M.B.; R. A. Gibbons, M.D., F.R.C.S.E.; Lord Dawson, M.D., G.C.V.O., and H. Crichton Miller, M.D. The evidence of these various witnesses, to whom the Committee has been greatly indebted, follows the Report and the Memoranda, which are here published.

In our previous Reports we have stated the limits of the responsibility of the members and ourselves in making these investigations and in publishing the various

Reports, and we cannot do better than quote our own words again :

“ The members of the Committee who have signed this Report are to be considered to have expressed their general agreement with its conclusions, without necessarily asserting their unanimity in every detail.

“ The Council left the members free in every way to pursue their inquiries, and the Report is now presented to the public without alteration by the Council. The Committee is alone responsible for its Report.”

It will be clear, therefore, that, in accordance with its settled policy here stated, the National Council is in no way responsible for this report, either in its recommendations or in the evidence which was placed before the Committee. None the less it is exceedingly grateful to the members of the Committee, and in particular to the Chairman, Mr. Gibbs, and also to Sir Arthur Newsholme and to Dr. Giles, for the time and trouble which, though themselves busy men, they have given to this investigation. It remains to say that the report is not suited, nor is it intended, for general reading, but for those medical men and women upon whom responsibility lies for giving advice on this most difficult subject.

The National Council would like, should financial help be found for this particular purpose, to proceed next year with the third part of its investigation—namely, the Economic Aspects of Birth Control.

It may here be stated that in 1925, at the time the

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Ethical Report was issued, the National Council also issued the Report of three years' scientific psychological investigation into the educational value of the Cinematograph, following its earlier inquiry into the physical and moral effects of the Cinematograph upon young people.

In this, as in other ways, the National Council of Public Morals, which is a voluntary body dependent upon charitable contributions, hopes to continue its efforts to serve the Nation, the Empire, and the Race.

60, Gower St., W.C. 1.

October, 1927.

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CONTRACEPTION REPORT

MEDICAL INQUIRY

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SIR JAMES MARCHANT, K.B.E., LL.D., F.R.S.Ed.

(General Secretary).

CONTRACEPTION REPORT

TERMS OF REFERENCE

- I. It is recognised that there are many aspects of the question of conception control; this inquiry is limited to its medical aspects.
- II. In using the term "medical" it is intended to make an investigation into the restriction of families by whatever methods it is accomplished and its effect on the bodily and mental health of the individuals concerned.
- III. Under the term "health" are included the relevant biological (physiological and psychological) factors which affect the normal life.
- IV. Among the particular problems which it is proposed to investigate are—
 - (a) the medical reasons for the exercise of conception control;
 - (b) the effect on health of sexual abstinence, partial or complete, in married life;
 - (c) the reliability as a preventive against conception of the so-called "safe period" with the relevant physiological and biological problems;
 - (d) the effect of the use of various contraceptives on
 - (i) the subsequent fertility
 - (ii) the healthof the persons concerned.

MEDICAL ASPECTS OF CONTRACEPTION: REPORT AND EVIDENCE

PART I

THE REPORT

1. AFTER careful thought and review of the evidence given by witnesses and gathered from the members of the Medical Committee, a provisional Report on the medical aspect of "Contraception" is submitted to the National Council for publication. The main body of our Report is medical, and is not concerned with ethical considerations.

2. Evidence has been generously and courteously given by Gynæcologists, including an American gynæcologist, medical officers of health, biologists, statisticians, and Medical Officers of Birth Control Clinics.

3. The opinions of individual members of the Medical Committee were freely given and are considered in this report.

4. The amount of scientific knowledge as to the efficiency of contraceptives based on statistical data is very small. On this subject exact information could only be based on the collection of scientific data extending over a period of years. Such statistics would

have to be accurately compiled from reliable observations extending over the whole period of the reproductive life of men and women.

American witnesses have helped the Committee by reporting the organisation of a scheme in New York for investigating Contraception from every point of view. Some years must elapse before results on a considerable scale can be expected.

Apart from possible data hereafter obtainable from the scientifically organised investigations adumbrated in that scheme, the Committee are unable to regard as satisfactory many statistical statements as to the relative success or failure of various contraceptive methods for preventing pregnancy. The statistics which have come to their knowledge have not been compiled in such a manner as to give confidence in the results as stated.

In the absence of satisfactory statistics, the Medical Committee must necessarily fall back on the knowledge and experience of witnesses and of others who have prescribed or used contraceptives.

Before giving their own conclusions as to this evidence, the Committee direct attention to two sources of error which appear to vitiate much that has been written on this subject.

(1) A considerable proportion of marriages are sterile apart from disease or from the use of contraceptives.¹

¹ In his *Fecundity, Fertility, Sterility and Allied Topics* (1866) Dr. Matthews Duncan has given valuable information bearing on the average fertility of married life. By fertility is meant actual productiveness, by fecundity the demonstrated capacity to bear children.

Similar data are given in *Natality and Fecundity*, by C. J. and J. N. Lewis (1906), and the chief source of information in both works is the national

(2) In normal experience of married life, the average intervals of child-bearing are much longer than is commonly supposed; and the facts do not bear out the impression that might be gathered from much of the writing on this subject.

record of births in Scotland in the year 1855. These were unique in Great Britain for their comprehensive detail, giving age of mother and of father and order of birth of the registered child. Unfortunately this detailed registration ceased after the first year, and there are no similar facts for subsequent years for any part of Great Britain. The data for the year 1855 have special interest as relating to a period when mechanical or chemical contraceptives, so far as can be known, were used but little or not at all. The figures given below may, therefore, be accepted as probably representing the fecundity and fertility of married life in the absence of volitional inhibition.

First as to fecundity. The variations of sterility according to ages of the wives at marriages are given as follows (Lewis, p. 152):

Proportion Sterile according to Experience in Scotland of 1855.

Ages at marriage.

15-19	.	.	.	.	.	15·6 per 100 wives
20-24	.	.	.	.	.	1·5 " " "
25-29	.	.	.	.	.	22·5 " " "
30-34	.	.	.	.	.	32·3 " " "
35-39	.	.	.	.	.	50·0 " " "
40-44	.	.	.	.	.	87·0 " " "

For wives married under the age of forty-five the percentage of sterile wives was 16·5. (Sterility is used to denote the absence of birth of living children from whatever cause.)

Next as to fertility. The Scottish figures for 1855 give the following results, showing the average interval in years between marriage and birth of successive children (Lewis, p. 100).

Intervals between births (in years) for successive births.

Age of Mother at marriage.

	1st.	2nd.	3rd.	4th.	5th.	6th.
20-24	1·49	1·50	2·16	2·12	2·24	2·22
25-29	1·43	1·49	2·06	2·13	2·05	1·86
30-34	1·67	1·54	1·74	1·74	1·67	1·40

In the ordinary married life of the young, usually an interval of about two years elapses between births; and after the age of thirty this interval usually increases. This has been the experience of large communities before modern "birth control" was known. Hence to speak of an "avalanche of babies" as almost inevitable unless special preventive measures are taken is inaccurate and misleading. The above statements represent average experience. There are, no doubt, many cases of too rapid child-bearing in which special advice is desirable.

In view of the above facts, the Committee have little doubt that contraceptives are frequently employed when, if they were not employed, conception would not occur.

Subject to the above considerations and to the fact that the Committee are attempting to base their opinions exclusively on medical grounds, they have arrived at the following conclusions :

(1) That the prevention of conception is being attempted by a large number of individuals.

(2) That this number is probably increasing rapidly.

(3) That the reduction in the birth-rate is partially, and perhaps chiefly, due to the increasing use of contraceptive methods.

The Scottish figures show that in 9 per cent. of the total births in 1855, the birth of an infant occurred first after two years of married life. The proportion varied according to age of the wife at marriage.

Wives showing first fertility after three years of married life (Lewis, p. 154).

Age of wife at marriage :

20-24	3'25 per cent.
25-29	3'22 " "
30-34	6'89 " "

(4) That judging from experiments on animals, diet may have an influence on fecundity in human beings; though, in view of the variations of fecundity in different communities in which no difference of diet has been detected, this remains to be proved. (See note by Prof. Leonard Hill later.)

(5) It is generally stated that contraceptives are producing a diminution in the number of offspring of those best able to bring up a family satisfactorily, but that they are not being used to the same extent by people who are unable to support their families, or by those who, owing to alcoholic tendencies, mental defect, or other inherited disease, are not likely to beget good citizens.

METHODS

Abstinence, while it is the obvious, and from the ethical point of view the ideal procedure when it is desired that no children should be born, is impracticable to the majority of young married people. In view of the fact that for many married people it is impossible to avoid sexual excitement, the non-gratification of this physiological act may lead to psychological ills, and if the normal sexual impulse be not satisfied—irregular sexual practices may follow.

Operative measures, such as destroying the continuity of the vasa or the Fallopian tubes. These are usually successful if correctly carried out.

In America an operation for producing an eschar at the uterine orifice of the Fallopian tubes is said to be successful.

Condom or sheath. This is probably the most certain

of contraceptive methods, but as its use necessitates intelligent care it is unsuitable for the ignorant and those under the influence of drink, while the cost makes it prohibitive for the very poor. It is practised effectually by intelligent persons.

To this method certain objections are raised, such as—
(1) Diminution of satisfaction in intercourse: various neurasthenic symptoms, including anxiety neuroses arising from doubt of success. No definite evidence of serious illness was obtained from witnesses.

(2) Liability to leak or burst: this is overcome by intelligent care in selection and use.

Rubber veils, pessaries, caps or cups: of these there are many varieties.

This method purports to interpose a rubber diaphragm between the cervix uteri and the living spermatozoa. It is being used in increasing numbers, as it is the method advised in the birth-control clinics of this country and in most of those in America. It is used with or without a chemical lubricant; most instructors advise the use of a chemical substance with a non-fatty vehicle placed above and below the veil; it is probable that the chemical vehicle blocks the orifice of the uterus, preventing conception; one specialist reports equal success with the chemical agents only, dispensing with the caps. Used as above these appliances undoubtedly effect their purpose in the majority of cases.

The objections raised are—(1) The method is ineffectual in the presence of contracted vaginal orifice, lacerations, prolapse, distortion, etc. (2) It requires a medical practitioner to fit the appropriate size and to teach the

woman to place it in position herself; the unintelligent, careless, dirty woman will not find it a success. (3) It involves the use of a douche before and after the removal of the appliance. (4) Serious illness may follow the retention of the cap in the vagina for long periods.

Coitus interruptus is practised by a very large number. The principal objection is that incomplete gratification sometimes produces well-authenticated psychological illnesses in both participants, as well as pain, tenderness, irritability of temper, hysteria and impotence; there is also the possibility of failure.

Quinine pessaries. These or other suppositories are used by a large number of people. They are less successful than other methods indicated, but they are easy of application, and as they have a certain measure of success with careful people they will continue to be used; in the opinion of many these pessaries have a permanently injurious effect, so that sterility is induced.

Lactation is often unduly prolonged for the purpose of contraception—generally speaking, it renders pregnancy less likely.

Safe period. There is strictly no safe period, as conception may occur at any stage of the menstrual cycle. Experience shows, however, that there is a time in which the chances of conception are materially diminished, namely, from about the eighteenth day after the first day of the preceding period until the end of the cycle. Many people have adopted with success the plan of limitation of coitus to this time. It is less rigorous than complete abstinence, and makes an appeal to married people who object to the use of any mechanical contrivance.

Possibly ovulation follows intercourse in the human being as in some animals (see Professor Marshall's evidence, p. 24).

Sponge packing. A sponge is sometimes used, soaked in some chemical substance or covered with vaseline. Success will be proportionate to the efficiency of the packing.

Douches of all kinds are uncertain and have the objection that, apart from the bad effect of too strong chemicals, the woman's health may suffer from her rising to use a douche immediately after coitus; while if she waits too long, it will be too late.

Injection of spermatozoa subcutaneously into male or female. Experimental work is being done in various countries, and according to some observers, the injection is followed by temporary sterility in some cases.¹

Intra-uterine pessaries, cervical metal caps, celluloid caps, etc. are dangerous instruments and have caused serious disease—and death in some cases.

Irradiation of the ovaries by radium or X-rays, and heat or pressure applied to the testes produce temporary

¹ In this connection Dr. Herbert Spencer directs attention to the following conclusions of Rocco Castoro in *Archivio di Ostetricia e Ginecologia*, Serie II, Vol. XIII, Dec. 1926, p. 558.

1. That semen of various animals injected into the female of the same species increases the period of temporary sterility.

2. That a number of injections protracted over a long period produces undoubtedly a state of protein cachexia. He therefore says, in practice it is important to take into account the optimum dose for each injection and the number of successive injections.

“And in fact in the groups (of animals) which have had the largest number of injections, I have noted not only wasting and loss of weight, but also, secondarily, death.” This fatal termination occurred in four animals.

or permanent sterility. These facts are now of great biological interest.¹

*The effects of certain diet deficiencies on fertility is also of very great interest.*²

Effects on Health of Individuals.

Men may be psychologically upset by the use of a mechanical contraceptive agent; they may be tempo-

¹ Prof. Leonard Hill has prepared the following note on this subject: "The scrotum of mammals is a local thermo-regulator for the testes, and this regulatory function is necessary for the healthy development of the sperm." (Ref.: Moore, *Journ. of Endocrinology*, 8, 493, 1924; Fukui, *Jap. Med. World*, 3, 26 and 160, 1923.)

Thus it has been shown that a testis returned from the scrotum to the abdominal cavity quickly degenerates, and that this degeneration is owing to the temperature in the abdomen being several degrees higher than in the scrotum. In a white rat the temperature was 8° C. lower in the scrotum when in a room at a temperature of 16° C. Hot-water pads applied to the scrotum, or hot baths, may produce this degeneration; so too may the covering of the scrotum with wool and waterproof material so that its temperature rises to, and is kept at, body temperature. This last experiment was effected on a ram. After eighty days the ram's testicles were found to be degenerated. It seems feasible then that clothing coupled with artificially heated rooms may produce diminished fertility in men who live an indoor life. It is suggested that the taking of very hot baths, such as some Japanese take, may have this effect. On the other hand, a cold douche taken after a hot bath may have a beneficial effect on the testes.

² Prof. Leonard Hill points out that experiments on animals have shown that sterility can easily be brought about both in males and females by certain alterations of diet, while the animals themselves remain healthy in appearance. There is a special vitamine labelled E which is necessary for fertility. This is found especially in the germ of wheat and in meat. Young mice brought up on a tea-shop diet, viz. white bread and margarine, biscuits and rock-cakes, and a little milk, may have young but cannot rear them. Stock-breeders complain of the relative infertility of race-horses, of bulls kept in byres, of cows bred and fed for high milk production, and of sows brought into condition for winning prizes at shows. It is probable then that the relative infertility of those living in cities is due in part to diet and conditions of life. A diet may be instinctively selected which lessens the sexual functions.

rarily less potent or impotent, but generally speaking their health does not suffer. Further, there is always the risk that if a man by using contraceptive methods is not fully satisfied sexually, domestic happiness may be ruined by his seeking satisfaction by other means or elsewhere, and possibly contracting venereal disease.

With regard to the woman, evidence brought before us suggests that in cases in which, on medical grounds or on account of already large families, contraceptives are advisable, their use brings about an improvement in general health owing to freedom from anxiety as to the possibility of pregnancy, increased happiness in the home, better outlook and greater affection for the children. Some women, on the other hand, suffer from irritability of temper or more serious effects on the nervous system. It is said that these latter conditions are more common when coitus interruptus is practised.

The Local Effects of some Contraceptive Methods.

Undoubtedly cases of infection causing disease must occur, but they must be comparatively rare or of small account, as the Committee have received little evidence on this point. It has been suggested that previously fertile women are rendered sterile by some methods of contraception—this has not been proved to our satisfaction; but there is evidence that the repeated use of quinine pessaries may be followed by sterility.

Retention of pessaries for an unduly long time, the use of strong chemicals, etc., are obviously capable of producing grave diseases.

It is difficult to estimate the degree of harm done by contraceptives as ordinarily used. Those who from religious motives object to their use are apt to lay great stress on these harmful results, and, on the other hand, those who advise them freely, not having this religious scruple, are apt to minimise the harm done.

Effects of Abstinence on General Health.

In the close relationship of married life the effects of continued abstinence may be grave for persons of certain temperaments.

Reasons for the Use of Contraceptives.

As this is a medical report, only reasons based on medical grounds can be given here. The indications for the use of contraceptives include diseases of an hereditary character, such as some forms of insanity, and in addition syphilis, incurable diseases such as non-compensated heart disease, Bright's disease and tuberculosis; also conditions that make child-bearing dangerous, such as pelvic deformity, tumours, severe debility and varicose veins, caused by frequent child-bearing.

Poverty, deficient housing accommodation, etc., are not within the scope of a medical inquiry.

General Remarks.

The entirely successful contraceptive, one that would be sure, harmless and simple, has not been discovered yet. The difficulty of the Committee was to ascertain the true efficiency of any method, as each one of the important methods is supported by its own particular

advocate; thus some medical practitioners support the condom or coitus interruptus, etc., and some supported each their own particular cap—some apparatus which required a fitting and a more or less elaborate technique, with subsequent examinations and consultations.

Where the use of contraceptives is called for, discrimination in the methods to be employed is necessary. Two important factors are the questions whether the avoidance of conception is to be temporary or permanent, and whether it is to be regarded as essential or merely expedient.

“Success” is defined differently by different witnesses. In England and in America some consider that “no further reports” from patients mean “all successes,” although the “non-reports” are from 20 per cent. to 50 per cent. It is difficult to ascertain success, as patients may be sterile without the assistance of contraceptives.

Under present conditions birth clinics can be started and carried on by irresponsible persons or by those whose only purpose is the sale of some particular apparatus. In our opinion such clinics ought to be under the guidance and control of experienced and judicious medical practitioners; and, further, hospitals should be centres for advice and instruction on the subject. When a hospital has an obstetric and gynaecological department, this would be the most suitable place.

As already stated, this Report is intended to deal with the subject of contraception from an exclusively medical standpoint. But, notwithstanding this, the Committee are of opinion that medical cannot be entirely divorced from social and moral considerations. Health and

disease are so intimately the result of the character of the individual as to make it almost axiomatically true that character is an important condition of health.

Furthermore, in a large community considerations of health and disease cannot be limited to the individual. If a man is not to be anti-social and anarchistic in his conduct, this conduct must be related to what is best for the social whole.

We lay stress on these considerations because we view with anxiety the indiscriminating publicity now being given by some persons to the subject of birth control. We repudiate the idea that innocence should be based on ignorance; but knowledge should be given judiciously, and some of the current publications on this subject we regard as a public bane, especially to young unmarried people.

We are of opinion that no impediment should be placed in the way of those married couples who desire information as to contraceptives, when this is needed for medical reasons or because of excessive child-bearing or poverty.

In this matter the welfare of the family, and especially of the children, should determine the common practice; and this welfare is not secured when there is only one child, or where too long intervals elapse between the birth of children.

A medical report cannot entirely ignore the bearing of this subject on the national welfare. There are limits beyond which a falling birth-rate is a disaster to a country; and when the restriction of population is based on selfish considerations rather than on grounds of health or

prudence, its effects are injurious to both the character and the welfare of the community.

The causes for the use of contraceptives are very varied. Among these must be given the crowded life of the city. This enormously enhances the difficulty and expense of rearing and educating children; and there is, furthermore, especially among young married people, the need to maintain a position on small or limited means. The desire to secure comfort and to avoid trouble, and perhaps on the part of the woman an exaggerated fear of the pain and other disabilities assumed to be associated with child-bearing conduce to the same end.

CHARLES GIBBS
(*Chairman*),

ARTHUR NEWSHOLME
(*Vice-Chairman*),

C. J. BOND,

A. K. CHALMERS,

AGNES DUNNETT,

J. S. FAIRBAIRN,

ARTHUR E. GILES,

LEONARD HILL,

FRANCES IVENS,

F. H. A. MARSHALL,

CHARLES PORTER,

HERBERT R. SPENCER.

MEMORANDUM I

FROM MR. C. J. BOND, F.R.C.S., C.M.G.

WHILE agreeing generally with the Report, I wish to add the following statement on certain questions which, in my opinion, might well be included in a Report dealing with the medical aspects of conception control.

I believe that adequate knowledge of the factors which affect fecundity, and of the best means of controlling conception, are steps in the evolutionary process whereby mankind will be enabled to exercise a growing influence over human destiny, and whereby also the possibility of increasing the racial stock of innate capacity will be brought within the range of human control.

If this be true, then it is evident that (the ethical aspect of the problem having been dealt with in a previous Report, and while recognising the need for further research into the physiological, psychological and sociological aspects), a very important preliminary step must be to endeavour to ascertain whether the practice of conception control is accompanied with, or followed by, injurious consequences to individual or national, and may we not also add to racial health.

It is the results of this inquiry which form the subject of the present Report.

I agree with the general conclusions derived from the evidence presented to the Committee on the effect of contraceptive methods on *individual* health.

There is, however, another problem of importance not fully dealt with in the Report. This is, not the question of the effect of contraception in reducing the number of children, but whether the practice of contraception offers any prospect of help in improving the quality of the human race in the future. This surely is a medical problem affecting *racial* health and well-being.

What this nation needs, and what the world needs, is not so much an increased number of citizens, but citizens of better quality—that is, of higher physical, mental and moral innate capacity.

It is, in my opinion, unfortunate that recent discussions on this subject have been almost entirely concerned with the effect of conception control on the quantity rather than on the more important question of the quality of human life.

Thus we are led to inquire whether the practice of contraception as carried out under present conditions, and in different sections of the population, does tend to racial improvement or to racial degeneration.

There is, as is stated in the Report (see conclusion 5), evidence in the differential birth-rate which suggests that, as practised, at different social levels of the population, in this country at any rate, conception control is to-day exerting a dysgenic effect. If this be true, then the fault lies, in my opinion, not in the growth of knowledge about contraception, but in the application of such knowledge to wrong ends, that is, to ends which do not promote individual or communal well-being or racial progress.

This, although no doubt partly an economic and partly

a social problem, is also largely a medical question affecting racial health and welfare.

The remedy, in my judgment, is to be found not in any attempt to curtail the spread of knowledge, but in making sound knowledge available for such married persons and persons about to be married as desire it, in all classes of the population, poor as well as rich.

This is a necessary step, but along with this spread of knowledge concerning conception control must also go, as stated in the Report, further instruction as to the duty and responsibility which rest on normally constituted married citizens of sound heredity and good physical and mental capacity, to beget and rear, as their circumstances allow, under the best possible conditions, children of sound constitution, adequate in numbers to perpetuate the race effectively.

This question of *adequate and worthy parentage*, so important in the interests of the children and the family, has, I think, been unduly overlooked in the biassed discussions and the heated atmosphere which have so far surrounded the birth-control controversy.

If the moral and social aspects of the problem of birth control be kept constantly in mind, and if this world-wide experiment, so full of possibilities for good and harm, be directed along right lines, then, in my opinion, there are no adequate medical reasons for condemnation, but rather for a wise recognition of the need for contraceptive methods in suitable cases and in appropriate circumstances.

The final test, in any case, must be biological and racial rather than medical and individual, except

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in so far as medical science itself becomes in the future more biological in theory and more eugenic in practice.

C. J. BOND.

I agree with the above.

A. DUNNETT.

MEMORANDUM II

NOTE BY SIR ARTHUR NEWSHOLME, K.C.B., AND
PROFESSOR LEONARD HILL, F.R.S.

WE have signed the Report, as we are in general agreement with its contents; but we wish to make three statements in modification of our adherence to the Report.

(A) We are convinced that even greater stress than is suggested in the Report may be laid on what appears to us to be the exaggeration as to the frequency with which control of conception in married life is called for in the true interest of the family, or for health's sake.

(B) Although we concur in the statement that little evidence has been adduced of physical mischief caused by contraceptives, we are not satisfied that they are harmless. Evidence on such a subject is difficult to obtain; and absence of evidence cannot be accepted as conclusive proof of harmlessness.

Nor are we satisfied with the very scanty negative evidence—necessarily lacking in scientific precision—which can be regarded as showing that (except perhaps after the use of certain chemical pessaries) sterility does not appear to be produced by the protracted use of contraceptives.

There is a further point which, although tangible evidence as to it cannot in the nature of things be forthcoming, we are convinced has great significance. Modern

medicine has widened its outlook, and it is becoming realised that health is complex, and that in it ethical elements, as well as physical, are necessarily involved. The persistent use of contraceptives by the newly-married and by other married people in cases where no medical reasons call for their use may, by promoting a lowered outlook on life and too physical a conception of the marriage relationship, and by causing the loss of those elevating effects on character produced by parenthood, be detrimental to the bases of character on which—as we now increasingly appreciate—a healthy personality is built.

Mere advice on the duty of adequate parentage, given to those who ought to have normal families, will seldom if ever activate the right line of conduct. This must depend on the general ideals of life. If these ideals are right, the individual may be trusted to take the ideal course.

(C) There remains the greater problem as to the influence which the use of contraceptives may exert on the health and well-being of the community. This has not entered into the inquiry by our Committee; and had it done so, we could not have resolved the discrepant teaching of the day on this biological problem. We desire to place our opinion on record, and to protest against the unjustifiably dogmatic assertions often made as to the effect of contraception, practised to its present extent, in producing a stock which is intrinsically poorer in its hereditary qualities. These assertions arise out of the greater fertility among poorer sections of the population who are assumed to be inferior in inherited qualities;

but, inasmuch as hitherto there has been almost complete failure to distinguish between the intrinsic or hereditary and the environmental, including pre-natal, influences concerned, these assertions must, except in regard to certain exceptional conditions, be classed as Not Proven. Given better conditions than those now existing for the children of the poorer sections of the population, their alleged relative inferiority may, in our opinion, be found to be non-existent. Meanwhile it is agreed that the children of the poor are often handicapped in acquiring full adult efficiency.

In view of the failure, when discussing the distribution of superior physical, mental or moral qualities, to make this distinction between inherited and acquired qualities we are left with the duty of pressing forward all reforms in environmental conditions—whether of nutrition, housing, nursing, education, recreation and play, or still more of personal example and training—which are within our reach; while deprecating and if possible preventing additions to the population in those individual instances in which evil heredity has been scientifically ascertained.

To deprecate without discrimination additions to the population on the part of considerable sections of the community on the sole basis of unproved general or average inferiority is to make assumptions of inherent inevitableness of inferiority which are unjustified by our present knowledge. Before this most debatable health problem is solved, protracted and laborious investigation is called for. When our scientific knowledge has increased, it may be found that many diseases and defects now supposed to be hereditary are not so, but resemble some well-recognised

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consequences of intra-uterine injury or toxæmia or infection, which in the recent past were erroneously believed to be truly hereditary.

ARTHUR NEWSHOLME,
LEONARD HILL.

We agree with the above.

HERBERT R. SPENCER,
FRANCES IVENS.

MEMORANDUM III

BY F. H. A. MARSHALL, Sc.D., F.R.S.

While I am in general agreement with the report, I am signing it with reservation as to the two concluding paragraphs (pp. 13-14), these referring to matters admittedly outside the terms of reference. In my judgment the dangers from over-population, especially among the less desirable elements of society, are greater than those from a falling birth-rate. My views on this subject are elaborated in the concluding section of my *Introduction to Sexual Physiology*, and it would be superfluous to repeat them here.

I should like to state also that I am in essential agreement with the excellent memorandum (No. I) signed by Mr. C. J. Bond.

F. H. A. MARSHALL.

PART II
STATEMENTS AND EVIDENCE SUBMITTED TO THE
COMMITTEE

I

PRÉCIS OF EVIDENCE BY F. H. A. MARSHALL, Sc.D., F.R.S.

EVIDENCE RELATING TO THE VITALITY OF THE SPERMATOZOON
AND THE UNFERTILISED OVUM IN THE FEMALE
GENERATIVE TRACT

THE investigation herein referred to was carried out on the rabbit by Mr. John Hammond, working in my laboratory at Cambridge.

The fact was taken advantage of that normally the rabbit does not ovulate excepting after coition, and that ovulation takes place regularly about ten hours after coition. Mr. Hammond has actually been able to demonstrate the process of ovulation in the living rabbit.

In the experiments referred to, a male rabbit, rendered sterile by vasectomy, was employed in order to induce ovulation in the females (by sterile coition). The females were injected with semen obtained from another male at varying intervals before and after ovulation (the time of which is known by reference to the occurrence of sterile coition).

It was found that the ova only retained their capacity for being fertilised for four hours after ovulation, and

that the spermatozoa retained their capacity for fertilisation for not longer than thirty hours after they entered the female generative tract. On the other hand, the spermatozoa retained their power of fertilisation in the male generative passages—*e.g.* after partial epididymectomy—for no less than thirty-nine days.

It is, of course, unsafe to argue from the rabbit to man, but there is a presumption that the vitality of the ovum and the spermatozoon within the limits of the Mammalia is not widely different.

There are certain further relevant facts which may be pointed out in connection with these experiments.

In the rabbit coition and ovulation may take place at any time over a somewhat prolonged period—two or three weeks.

In man it is not known for certain whether ovulation always takes place spontaneously or not, but there is some evidence that, in certain individuals at any rate, ovulation can only occur after coition or after an orgasm (as in the rabbit).

The recent observations of Dr. Wilfred Shaw of St. Bartholomew's Hospital show that the most usual time for ovulation in women is from the 14th to the 17th day after the beginning of the menstrual discharge (*i.e.* the 14th to 17th day of the cycle). I suggest that in some individuals ovulation may be hastened by coition, and that in others it may be postponed owing to the non-occurrence of coition. Consequently, although the time from about the 20th to the 28th day of the cycle may ordinarily be a "safe period" it is not necessarily so.

It will be remembered that Siegel (1916) and Zanger-

meister (1918), as a result of studying the effects of soldiers on leave from the front visiting their wives at different periods of the menstrual cycle, deduced an interval of sterility from about the 23rd day to the end of the cycle.

THE CHAIRMAN (Mr. Gibbs): May I ask Dr. Marshall to define exactly what he means by the word ovulation?—The discharge of the ova.

You mention that the spermatozoa may be found alive in the generative tract of the male for thirty-nine days. Where are they found?—In some experiments the epididymis was only partly removed and the sperms were in the vas deferens and what was left of the epididymis.

As a biologist, can you tell us where the semen is stored?—It is stored in the epididymis and in the vasa.

And have you any knowledge of the influence of chemicals on the spermatozoa or on the ovum?—Not on the ovum. On the spermatozoa we know you can keep them alive outside the body in saline solutions for a fair time, but that question does not come in here and I have not touched on it. They have been kept alive outside the body and got to fertilise after forty-eight hours.

I mean rather in the nature of noxious chemicals, in regard to contraceptive control?—We have not gone into that.

In recent work it has been proved, and I wondered whether the work was done in your laboratory, that spermatozoa are not killed by quinine, which suggests

that quinine pessaries are useless?—I have heard that, but the work was not done in my laboratory.

Have you any evidence that would help us with regard to sexual abstinence and ovulation? Does sexual abstinence delay ovulation, or alter it in any way?—Yes, it does in the rabbit after a long time, but it is only in those animals that do not ovulate except after coition.

Can you give me this information? You say that coition and ovulation may take place during a period of two to three weeks. What period does that correspond to in the woman?—That is a difficult matter. The rabbit is quite different from most animals—I am leaving out the woman for the moment—because it does not ovulate except after coition, and the result is that the rabbit remains on heat for a phenomenally long time, for weeks. It is like the ferret, which is capable of remaining on heat four or five weeks for the same reason—that is, it remains in this condition without discharging the ova for quite a long time, and the period is ended by copulation.

DR. AGNES DUNNETT: You say: “Although the time from about the 20th to the 28th day of the cycle may ordinarily be a ‘safe period,’ it is not necessarily so.” I think that the 28th day is getting dangerously near the next cycle?—Yes, that is what I mean.

I think that the safe period always ends by the 25th or 26th day. You have got such different conditions in a rabbit. But it is considered in man that just before the period is also a time for fertility?—Yes, but then the cycle is reckoned as beginning with menstruation, the beginning of the flow, but you do not get ovulation happening until a good deal later.

Well, I do not think there is any evidence as to when this does come about or how long the ova take to come down the tube. Conception is supposed to take place one week after the period in a majority of cases?—Yes.

It is held that ovulation can take place just before the menstruation period?—It may occasionally happen that owing to the ovulation being postponed, you get it at the end of the period. That would mean a “hold up” of the ovum in the ovary. . . . Owing to failure to ovulate through the absence of the right stimulus, the ova might not be discharged at the more normal time. But if you get coition on the 27th or 28th day, it might stimulate ovulation, and that would account for the cases when you get it on the 28th day. I should imagine these cases are very abnormal. They are cases of postponed ovulation.

Your experience is that the ovum is quite a short time travelling from the ovary to the womb. Do you mean hours or days?—Days; that is definitely known, and it is a matter, I think, of about two or three days in the rabbit.

DR. ARTHUR E. GILES: There was one question that occurred to me when I was reading this interesting document, and it was, how far could it be considered that the conditions in humans can correctly be deduced from the conditions in animals?—That I cannot answer. I said something about that in a line at the bottom of the page: “It is, of course, unsafe to argue from the rabbit to man, but there is a presumption that with certain known exceptions the vitality of the ovum and the spermatozoon within the limits of the Mammalia is not widely

different." The only definite evidence in support of that is, that one does know in animals like the cow and the mare that if one get coition too early or too late it is liable to be followed by sterility, so there is some definite evidence after all that the gametes do not live for long in other domestic animals.

There are two points that strike me as being of great interest, that are quite new to me; that coition in certain animals brought about the stimulus for ovulation?—That is the case in the rabbit, the ferret and the cat, but not, so far as I know, in any other lower mammal, at least normally.

As a rule one has thought that the œstrus is the first step, and it is only then that the animal will receive?—In the case of the rabbit you get a long œstrus, and it remains on heat, like a ferret, for a phenomenally long time. The rabbit will remain on heat for weeks at a time.

I think this last paragraph in your summary is of great value as being direct evidence in the human race, I mean the observations of Siegel and Zangermeister?—Yes, I think they are probably reliable. They have a good reputation, at least Siegel has.

I take it that one difficulty is that in the human we do not know when ovulation takes place?—I think Dr. Shaw has narrowed it down very well. He published a paper on the subject in the *Journal of Physiology*. He is in charge of the Gynæcological Clinic at St. Bartholomew's, and he has been working on this subject with great care and accuracy. I have seen a lot of his material, so I know about it at first hand. He has made it quite clear that ovulation does generally take place somewhere about the

15th day. That, as far as I know, is the first definite work which has been done on the subject on such an elaborate scale. He got his material from operation cases, a very large number. I ought to say, perhaps, in answer to that question about whether you can draw deductions from one mammal to another, that there is an important exception, and that is the bat, which is a hibernating animal. The spermatozoa also hibernate, and so live for a considerable time, for six months in fact.

DR. BOND: Does Professor Marshall mean the spermatozoa living in the male body or in the female?—In the female.

DR. ARTHUR E. GILES: In regard to that question, of the viability of the spermatozoa living in the bat, how far is it possible to preserve the spermatozoa by cold; does that lengthen the time?—We have done that ourselves. You can maintain them alive for a matter of ten days or so, by keeping them very cold, but they will not fertilise after that time. The longest time they have been kept outside the body and been known to fertilise, I believe, is forty-eight hours. That was done in our own laboratories at Cambridge by Mr. Walton.

Has it yet become a practical thing to transmit the spermatozoa from a stallion by post?—I do not think it has, but we are going to do it with rabbits.

If you get them out from the male tubes, you can keep them alive?—You can keep them alive much longer.

It could be done by sub-culturing?—Yes, as a matter of fact we are on that problem now. The furthest we have been able to keep them alive so as to fertilise ova

has been about forty-eight hours. I think they may be kept alive probably more than forty-eight hours.

Have you any knowledge of how many spermatozoa get up the tube in fertilising; do many get up?—More than one. If you cut sections through the tube you find a number of them, but what proportion of the total number it is extremely hard to find out. You get them all over the place, and you get more than one or two going up. I think in normal cases you always get enough.

Was Mr. Hammond able to demonstrate the process of ovulation in the living rabbit?—Yes, by letting it copulate and then opening it up ten hours afterwards and keeping it under an anæsthetic you can actually see the follicles bursting.

The anæsthetic did not stop it?—Sometimes the experiment was not successful, but it was successful at least three times.

In regard to Dr. Wilfred Shaw's observations, it looks as if the mid-time, which some people consider the most safe, to prevent impregnation, was the most dangerous time. If we can carry over this rabbit observation to human beings, and suppose the ovum only lives a few hours, it means that the 14th or 15th day is the most dangerous time?—Yes, it would appear to be the most dangerous time, and I did not have the view that it was the safest time.

The tendency has been to regard the most likely time of impregnation as about the week after menstruation, and after that the tendency gets less?—That agrees with my view.

THE CHAIRMAN : You say the dangerous period starts

about the 17th or 18th day?—Yes, but I do not know when you reckon menstruation comes to an end.

Would you allow it a week?—Well, a week after the end of the menstruation would be about fourteen days.

DR. ARTHUR E. GILES: The chances get progressively less?—After the 17th or 18th day that is probably true.

PROF. LEONARD HILL: If the spermatozoa only live thirty hours, there again it looks as if copulation after the cessation of the menstruation period was not such a dangerous time from the point of view of conception. If ovulation is going to take place after the 17th day, that has rather upset the old views, has it not?—Possibly coition may hasten ovulation, and talking about that, it does happen in sheep; coition may hasten ovulation.

DR. A. K. CHALMERS: May I ask, in regard to what seems to be the recognised fertility of rabbits, whether the period of œstrus is subsequent to a period of increased food supply, or whether it is something determined by physiology?—There is no doubt that in rabbits, as in other animals, an increased food supply does increase fertility. That is perfectly clear, and you get it in sheep as well as in other animals.

So increased fertility in the animal is preceded by some movement in the vegetable world?—It may be due to that.

DR. C. J. BOND: Can you tell us your view in regard to the stimulus which causes ovulation after coition in rabbits? That is to say, should we be right in regarding it as being a nervous stimulus or something chemical or of a hormonal character?—I think it must be nervous, because you do not get it by injecting semen; that does

not cause ovulation. You must get an orgasm to bring about ovulation in the rabbit. It need not be sexual intercourse: you occasionally get two females together and they jump one another after the manner of cows, and you can get ovulation occurring that way. This is unusual, but you can get it. But injecting semen without there being an orgasm does not induce it.

Well, then, have experiments been made of the cut-and-dried character of laboratory experiments in regard to the effect of contraceptives on animals?—No.

You have not attempted that?—No.

I mean the chemical action of various things like quinine?—That has not been done in our laboratory.

It is a different problem, the introducing of chemicals into the normal passages, than killing the spermatozoa outside?—Yes.

What effect have the substances in which the spermatozoa live and swim in the male secretions on the life of the spermatozoa on the one hand and the ovum on the other? Have they any influence on the fertility of the ovum apart from the spermatozoa which might, for the purposes of our ideas, have been washed in normal saline and used?—We do not know what effect they have on the ovum, but in regard to the effect on the life of the spermatozoa, the evidence is that they shorten it. They stimulate the spermatozoa, because the spermatozoa taken from the epididymis where they have not been acted upon by the accessory secretions live longer on the average than the spermatozoa which have been right through the passages. The question bears directly on what I have said in the first page of my précis, that “the

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spermatozoa retain their power of fertilisation in the male generative passages—that is, after epididymectomy—for no less than thirty-nine days.”

That is, in the passages after partial epididymectomy?
—Yes, if they have been in the passages and they have preserved their vitality all the time, and if you inject them into the female, you get fertilisation up to the 39th day.

II

ROBERT L. DICKINSON, M.D., F.A.C.S.,
Secretary, Committee on Maternal Health,
370, Seventh Avenue, New York.

DR. DICKINSON: In answer to the courteous invitation by your Committee I welcome an opportunity to give evidence. The medical profession is faced with two choices concerning a world-wide problem presenting new conditions which the doctor has helped to create. He has taken his part in fostering increase in population through successful contest with preventable disease and infantile mortality and by bringing delicate people up to marriageable age. He may be expected to do his share towards solving the problem. The two choices with which the profession is faced are these: to investigate medical aspects of control and conception, or to decline to investigate. We may apply to this subject the methods of inquiry which we declare essential for all other medical problems, or we may continue to refrain from collecting and analysing facts. If others take up the work, the situation may well develop in this fashion: preliminary physical examinations; the making of diagnoses in both men and women; the selection of what is often a method of very special local treatment; the "follow-up," covering months or years; the subsequent examination concerning physical and mental

effects to determine whether that method has done harm or good; the supervision of medical records and the analysis of results, may be left to those who have had scant training or experience on lines generally believed to qualify for these functions. Such examiners and recorders may have a bias, or a case, to prove. Where feeling runs high in opposite directions, the examinations and records may not be supervised and inspected by a bipartisan commission or group. Under such circumstances, evidence will be discredited and little progress made. Has this happened? An authoritative inquiry, not into opinions and surmises but into evidence, and to secure ample data, is in order. Each country may well take up its own special problems, with methods suited to its needs. Our medical profession, like yours and that of the Continent, adopts what without injustice may be called an official attitude towards any real or full consideration of control of conception or its technique. It excludes these from out of its textbooks, declines to discuss them in University lectures—with a few notable exceptions like Columbia and Hopkins—or allow them on programmes at representative meetings, and is unwilling to conduct an authorised *clinical* investigation—at least with us. Propositions for study and definition of the actual medical need by the societies of medical specialists, each in its own field, have been side-tracked. While the New York Obstetrical and the American Gynæcological Societies are on record as favouring investigation, the American Medical Association has blocked, within six weeks, the recommendation sent up by its Obstetric Section, to

the effect that existing laws be altered wherever necessary, as in fifteen States, to allow physicians to give contraceptive advice. The profession has been accused, and you see on what grounds, of obstructing the producing of evidence. In America we have made a mere beginning in collecting data. In March 1923, the Committee on Maternal Health began work on questions of human fertility and sterility. It was self-constituted, as no scientific organisation could be found that was willing to include a study of birth control. Invitations to take part in an inquiry conducted thoroughly and on an impartial basis were sent to authorities representative of several medical fields and divergent points of view and to a few clinical workers.

Out of the 35, all but one accepted. Members of the lay, legal, nursing and social worker groups were invited, and Roman Catholic interests were included. To be intensive and properly inspected, the clinical study had to make a beginning as a local matter. New York City was chosen, as showing the least animosity of any large city, though Chicago and Los Angeles have good clinics. The literature was abstracted and indexed, and existing clinics and their records were looked over. A medical inspector, skilled in dispensary inspection and interviews, made 149 visits in Holland, France and London. A senior gynæcologist, acting as volunteer secretary to the Committee, and giving a large part and then full time to the work, carried on for three years an extensive search for the records and practice. His travels cover principal cities in nineteen countries in Europe, America, the Near East and the Far East. His thesis is twofold.

First, the study of control of conception cannot be precisely dissociated from consideration of sterility, sterilisation and an attempt at definition of the normal in sex life; and second, the conclusions must be based on the analysis of a long series of careful records of patients' histories and physical examinations, with adequate follow-up, the whole carried out in a reasonably scientific spirit. A bonus was offered by the Committee for good records, made in out-patient departments of prominent institutions with due follow-up. Though undertaken by a few such institutions, at first informally and then under written specifications, with our salaried Executive (Medical) secretary keeping in touch with the dispensaries, relatively few histories have been obtained. The reasons are varied, but the result is in brief this: that women, including those who as all agree would have life and health imperilled by pregnancy or labour, apply to the propaganda organisations and not to the hospitals, that have been for decades refusing to consider their problems. Incidentally I can show you a long list of prominent obstetric services of Europe and America which state that they decline advice in cases where the woman is instructed by themselves that child-bearing, for a given time, entails grave danger. As a gynæcologist and obstetrician, for over forty years in practice, frank advice for medical indications and often for economic reasons for at least thirty years, with rather full records which are now being analysed, my memory does not recall injury from any contraceptive means except in the long intra-uterine stem.

Believing in early marriage for reasons of chastity, I

have urged it, and watched the results. I *have not* seen sterility from any other means than stems.

In New York the situation is as follows :

The American Birth Control League, whose President is Mrs. Margaret Sanger, states that this League has received requests for information from 60,000 married couples each of the last two years, and that over 7000 doctors have asked for counsel and instruction.

These are, therefore, requests for medical advice made, not to a medical organisation, but to a registered nurse. Under these conditions it seems time for our profession to bestir itself.

The League has run a clinic, much on the lines of your Walworth Clinic, with a doctor in constant attendance. It was located in the editorial business offices of the organisation. When our first report criticised some of its methods and records, Mrs. Sanger requested advice of the Academy of Medicine (the centre of New York's medical activities), formally offering to correct any unethical or undesirable procedure or plan. A Committee was sent to investigate. By request, the majority of the Committee members were selected because of their outspoken, critical point of view. Their report was adopted by the Academy. After reviewing the three years' attempts to develop this study in existing dispensaries, it recommended, for the present, a special clinic, but with the two provisos : that a Board made up of leading gynæologists, obstetricians and other medical members of high standing undertake supervision and regular inspection, and that favourable action be secured from the State Board of Charities which licenses dispen-

saries. The clinic was removed from the League office to a ground floor close to a leading out-patient department—the latter in order to secure responsible endorsements on medical indications, which are the only ones on which advice can be given legally in the State of New York. For the new organisation to operate the clinic, a Governing Board of eleven was made up, mostly of prominent medical men. The need was acknowledged by the State Board and its standard requirements were met. Whereupon it developed a fresh and novel requirement, namely, that waivers of objection or statements of neutrality be secured from specified religious groups. These are available from Church organisations other than the Roman Catholic. This religious body has thus been placed in the clear-cut position of blockading a scientific investigation which has received the highest medical endorsement. Moreover, a State Board of distinguished members serving without salary, at whose hearings on the matter no Church objection was voiced, declares licence is “against public policy” until this Church waives objection.

Dr. Katherine B. Davis of the Bureau of Social Hygiene has shown that among a thousand American married women of intelligence, mostly college graduates—excluding the 8 per cent. who practised abstinence, and the sterile or the one-child sterile—the belief in the rightness of spacing of children and contraception was general and was acted upon.

Our American situation may be summed up by saying that the propaganda organisation, with its journals, books and lectures, has the patients in large numbers who can

rightly claim attention on medical indications, or on extreme economic need, while lacking skilled diagnosticians for the general physical indications, lacking actual supervision and inspection by specialists of high standing and without convincing records or any adequate follow-up, whereas our out-patient departments have these other things but not the patients. Perhaps your situation is not unlike ours.

From our American experience this may be said. A mere list of names, however conspicuous, gets little done. A start on clinical study is hardly worth while unless an energetic volunteer or salaried secretary is found, who can give full time or nearly full time, can command respect, who has patience under rebuffs, and who is preferably a medical person with gynæcological or obstetric experience. Behind such an individual must stand a committee of men and women of national reputation, ready to back the effort steadily and to secure funds for the study over a period of years.

Under such conditions, one or more of the existing birth-control clinics should be taken over as a demonstration experiment or new clinics started within an existing institution. With such an equipment research money is easier to secure, the scattered work on the subject is properly centred, and dignity and decorum are ensured.

The future.—Personally I believe that the present crude controls, with their handicaps, psychic and physical, will be replaced by methods with fewer objections or none. We have already means at our command to postpone or arrest the manufacture of ova and spermatozoa. The

question yet to be answered is whether such interference can be so employed as to escape penalties. There must be no bodily harm involved, or if there is, it must be negligible. There must be assurance that such full recovery of ovary and testicle occurs after arrest of function, that the subsequent progeny is entirely unharmed. These provisos are self-evident. It is the business of our Committee to stimulate, to initiate and to co-ordinate researches, and where necessary to secure funds for such work.

Researches under way at present are as follows, several of these having been started and partly financed by our Committee.

(1) To define the "safe" period in women. As the cyclical alterations in the vaginal lining in many animals show the exact day or hour of the escape of the ovum, it was desirable to determine whether the day of ovulation could be recognised in women by analogous tests, namely, the simple vaginal smears. This painstaking study on thirty normal women and many pathological states has been in progress for nine months. Incidentally, important data on very early diagnosis of pregnancy, of ectopic pregnancy, of sterility from lack of ovulation, and of the effect of irradiation of the ovaries, of spermatoxins and of animal extracts on ovulation may be thus developed.

(2) (a) Irradiation of the ovaries of monkeys, to see whether ill effects on the animal or on its progeny result from a dosage sufficient to produce temporary arrest of ovulation. (b) Collection of case histories and follow-up where radium or X-ray has been followed by pregnancy.

(3) Diathermy of the testicle. Very slight alterations in temperature affect spermatogenesis. Thus the undescended organ in the groin does not produce spermatozoa until it is brought down, and, in rats, the placing of the testis within the abdomen arrests this function. Even bandaging of the rat testes tight against the belly hampers production. The study of heat as a temporary arrester of spermatogenesis and the completeness of recovery is going on.

(4) *Spermatoxins*.—Suspension of ovulation or spermatogenesis through intravenous injection of dilute sperm is a ghost either to give substance to or lay at rest.

(5) Placental and other organic extracts that may affect ovulation and spermatogenesis are being studied in animals.

(6) Semen studies are under way, particularly in their bearing on sterility. The variability in a given man under differing conditions, the optimum or best interval, the bacteriology, the reaction to a variety of chemicals, the reaction of a given good specimen to the vaginal secretion of several women, the duration of life in the passages—these are examples of such study.

(7) Whether absorption of the male element occurs or affects fertility or the well-being of the woman is to be taken up further.

(8) The study of bacteria of the vagina is said to have lacked proper bacteriological technique, and a new research has been undertaken. This has a bearing on sterility and puerperal sepsis as well.

(9) Simple spermaticides and the possibilities of chemical damage within the vagina.

(10) Follow-up on some thousands of sterilised patients (vasectomy and ligation of tubes).

It is often stated that medical institutions are not prepared to recommend any method because all exhibit failures. While it is true that there is no present contraceptive that can be guaranteed, it may be shown that failure to protect is usually due to improper selection or to carelessness. In the same way, save for the long intra-uterine stem, physical injury may well be due to improper use rather than to the method itself. Thus, the writer of a very recent paper in condemning the soft rubber cervix cap is only one of many who raise objections that refer to the practice of thirty or fifty years ago of leaving pessary in place for weeks, a usage that no longer holds.

As an example of an unscientific attitude not uncommon in these discussions, one may instance the dogmatic statements made by eminent gynæcologists, that early marriage is to be condemned where pregnancy must be deferred, because contraceptive methods will produce sterility. In the first place, no discrimination between methods is made. In the second place, there is no record that I can find of males and females examined at marriage and found fertile, or presumably fertile, who later become sterile. This is a serious indictment if the warning blocks early marriage and it be true that early marriage has a considerable importance in lessening illicit relations. Such pronouncements, unaccompanied by data, may well be subjects of careful qualification.

From our American experience I venture to express the opinion that for the medical profession certain *present duties* seem well defined; for example :

I. To get the facts. This involves study of an adequate series of histories of cases properly followed up.

II. To accept responsibility. (a) Existing hospitals and dispensaries, when informing a patient that child-bearing involves temporary or permanent danger to life or health for mother or child, should assume the responsibility of giving counsel and treatment for control of conception, or else refer the patient where such advice can be wisely obtained. (b) Physicians should assume the same attitude, but may ask for consultation.

III. To let the public understand that, in the presence of clear-cut medical indications, institutions of recognised standing will provide advice and treatment.

IV. To employ those methods now in use which have proved themselves to furnish the most efficacious protection without injury, or with the least risk of injury, until better methods can be devised.

V. To start a study to clarify and define those medical indications concerning which there is present difference of opinion.

VI. To discover or develop some social organisation which will study to classify the economic indications.

VII. To undertake research, looking to better methods.

VIII. To develop or take over one or more demonstration clinics, under a Board of leading gynaecologists, obstetricians and others, who will promise definite supervision and inspection of methods and records, for the purpose of intensive study of the problem.

IX. To combine with the above programme studies bearing on sterility, and also accumulation of data, when available—looking to better understanding of average or normal sex life.

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X. To avoid dogmatic pronouncements in the absence of case history evidence.

XI. To proceed cautiously and circumspectly and with due regard to the especially delicate nature of many features of the investigation.

XII. To pray for courage and wisdom.

III

DR. GERTRUDE STURGES OF NEW YORK

THE CHAIRMAN (Sir Arthur Newsholme): The witness to-day is Dr. Gertrude Sturges of New York. I will ask her a few questions, and then we will proceed to question her all round the table. You are a Doctor of Medicine and you live in New York?—Yes.

And you have had a large amount of experience in administration work in connection with investigations?—Yes.

What was your first chief appointment?—I was the Executive Secretary of the Association of Tuberculosis Clinics of New York City, Dr. James Alexander Miller being the Chairman. I was later Assistant Director of the Cleveland Hospital and Health Survey; Haven Emerson, Director.

And then later you were the Assistant Secretary of the Associated Out-Patient Clinics of New York City?—Yes.

You were there three years?—Yes.

And your present appointment is what?—I am the Executive Secretary of the Committee on Maternal Health of New York City.

And that was formulated under what conditions?—The committee was organised to study the questions of sterility and fertility, including contraception and sterilisation from a medical and public health point of view.

So they took a wide scope, not only of use and abuse of contraceptives, but also the wider questions of sterilisation?—Yes, but I do not want you to be under a misapprehension. In the beginning this wide scope may have been a camouflage to obviate antagonism.

Perhaps you would give us the names of your committee, as I am sure some would be known?—Dr. Samuel W. Lambert is the Chairman.¹ He is one of the leading consultants in New York City. Mr. Bailey B. Burritt is a layman, director of the Association for Improving the Conditions of the Poor, and represents organised charity. Dr. Haven Emerson is Professor of Public Health Administration of Columbia University. Dr. Robert T. Frank is head of the Department of Gynæcology of Mt. Sinai Hospital. Dr. Frederick C. Holden is the head of the Department of Gynæcology and Obstetrics at Bellevue Hospital and Professor of Gynæcology at University and Bellevue Medical College. Dr. George W. Kosmak is the Editor of the *Journal of Gynæcology and Obstetrics*. He is extremely conservative. Dr. R. L. Dickinson is a former President of the American Gynæcological Society, and is a more radical member of the committee. Dr. James Pederson is a consulting Urologist. Mrs. Gertrude Pinchot is a lay woman who acts as treasurer. Dr. W. F. Snow is the executive officer of the American Social Hygiene Association. Miss M. A. Wales, R.N., is the Executive Officer of the Visiting Nurse Association of New York City.

You represent different phases of opinion in relation to the desirability of birth control?—Yes.

¹ Now president of the New York Academy of Medicine.

And you regard your committee as being a distinguished committee of New York physicians in the main?—Entirely, I should say. The committee is endorsed by the American Gynæcological Society, the New York Obstetrical Society and the Public Health Committee of the New York Academy of Medicine.

You are their Executive officer?—Yes.

When you say camouflage, the idea was not to make it a committee of birth control, owing to the New York law?—No, it would not have been affected by the law. I simply want to be very frank with you. I believe that when the committee was organised, their chief object was the study of contraception. But when the conservative men came to consider the matter they decided that a wider scope of inquiry was essential. In our research, what we find out about fertility, for example, affects just as much the problems of sterility, and they insisted on an unbiassed inquiry.

Now as regards the methods of work of this committee, what are the main objects in view?—The objects are to secure information on all these questions; sterility and fertility, contraception and sterilisation.

And the methods employed you would put under three headings?—Yes. (1) The definition of medical indications for contraception and sterilisation. (2) The clinical study of contraceptive methods to determine their relative efficacy and harm or harmlessness. (3) Biological research. We have also made an effort to look into the available literature, and have inquired into the experience and opinions of physicians in other countries.

You interest yourselves in the medical side only?—Yes;

we know that there are other important considerations, that is, economic and moral, but we try to limit ourselves to medical considerations.

Was it because of the intention to deal chiefly with medical indications that you had a committee of general physicians as well as special physicians?—I do not think I can definitely say that, but I think that it is probably true. Some of the committee are interested in the matter from the standpoint of their own practice and things they have had to deal with; that is, Dr. Emerson with tuberculosis and cardiac disease, Dr. Snow with venereal disease. We are also engaged in the medical indications because under the New York State law we are permitted to give advice in contraception only on medical indications. So it is essential in our clinical work that the young physicians in charge should know the medical grounds.

I understand that one line of investigation was to find out what other countries were doing, and you were deputed to visit those countries and ascertain what had been done?—Yes, that was the first thing. We were quite ignorant and wanted to find out what the other countries knew.

You spent several months in that investigation?—Yes, about eight months.

Perhaps Dr. Sturges will tell us the general result of her inquiries in Holland. Did you find official clinics in birth control?—No, there was nothing in the nature of a "clinic" as we understand the term. Moreover, the so-called "clinics" were not official in character. I have been challenged on these statements, but submit that they

are correct as to what I saw in Holland in the spring of 1924. I think it is only fair to me and my committee for me to say here that I know nothing about gynæcology or obstetrics. I was employed by the committee because I was a trained investigator and knew something about clinics.

So you went as an impartial outside observer?—Yes.

You went to see these Dutch clinics. Were any of them officially appointed under the Dutch Government?—No, the so-called clinics as I found them in 1924 were run under the auspices of an organisation known as the New Malthusian League. In practice they were independently run by the women in charge.

Who were the women in charge?—I visited three clinics. One of the three was in charge of a midwife, and the other two were run by ordinary women.

No doctors?—They were neither doctors nor nurses; they were middle-class women. One was the wife of a street-car conductor, and one kept a hairdresser's shop.

In the three clinics you visited, was advice given indiscriminately?—Only one clinic was in operation, although I went on the days specified by the "list" circulated by the League. The clinics are advertised by letters sent out to all women who have recently had babies. I will give an account of the visit I made to one of the clinics in Amsterdam which was supposed to be their "show" place. I was accompanied by a former Vice-President of the League; my visit was expected. The woman in charge of that clinic is the person who was officially appointed to train others, the other women "practitioners" I call them.

What was your evidence on that particular one?—That particular clinic was held in the evening in the home of the practitioner; it was a simple, comfortable place. Seven patients attended. The equipment was simple. There was no running water, but a basin of water changed once, and a reclining chair. Ordinary surgical technique was lacking. No questions were asked. There was only one new patient. That one new patient was not asked her name or address, whether married or single or why she wanted advice. There were no records of any character or description, no pencil was put on paper during the entire proceedings. I was later informed that the practitioners refused to submit statistics as to numbers of patients treated.

You visited certain clinics in England. Did you find in those clinics in England accurate records?—May I say one more word about Holland? We had understood at home that the Government operated those clinics. The Health Officer of Amsterdam explained that every organisation in Holland that was not frowned on by the Government was officially recognised, and that the Malthusian League had the official recognition of the Queen, which they had used in their propaganda, giving rise to this misconception. He told me that the attitude of the Government was neutral, that there was no official connection whatever, even in the nature of an inspection.

What did he himself think about them?—I do not recall that he committed himself.

Have you any evidence you would like to give as to your visit to the English contraceptive centres?—I am loath to express an opinion. They are right here in

London and you have free access to them. I spent only about two hours in each clinic. On other jobs I have spent three or four weeks in a clinic before expressing an opinion on the character of the work and recommending change. I can give you an impression of these clinics as I saw them two years ago, but whether that would be of any value to you I doubt.

May I ask a question? You are concerned in getting case records for your committee in New York. In your visits in London did you get any evidence of case records which you could take back to New York—that is, valuable records?—The best records I found were in a physician's office, his private office.

I am speaking of the clinics?—The records in the Walworth clinic had not been analysed. Marie Stopes has recently published the analysis of the records of 5000 patients.

Are you going to use that for your committee?—I do not think that my committee are going to accept them as conclusive.

What other clinic did you examine?—I examined the Walworth clinic. My impression was that the work there was being carefully done. The evidence they submit will, I think, be worthy of your attention.

Do you think that there is any valued evidence available at the present time on a considerable scale to enable one to come to a judgment as to the best methods or the desirability for a medical man to follow?—No, the evidence is too meagre.

The expressions of opinion are?—They are absolutely contradictory.

That you have found in going round?—There are a large series of records in your two clinics, the Mothers' clinic with 5000; the Walworth clinic with several thousands; Dr. Haire with about 2500.

But one of them is a private practice?—Yes, Dr. Haire started the Walworth clinic.

In what way are these records conflicting?—The two clinics use different methods, and both claim success with the methods they use.

And they also point to the fallacy of the other method?—Yes.

You would state that it is absolutely necessary to obtain case records under different conditions?—Yes, but I do not say that these records are not worthy of attention.

You started in New York an attempt to obtain case records?—Yes.

Will you tell the committee in what way you have gone about it as to the methods of obtaining accurate case records?—Our way may not be the best, but this is our plan. Under the highest medical auspices we have established our service in the gynæcological clinics in nine of our leading hospitals. I submit the list herewith.

These are clinics at which certain members are, I understand, paid to make inquiries and keep accurate records of individual cases?—In some cases they are paid, but in others not. We offered an honorarium in order to secure complete records, which are very difficult to keep in our out-patient service.

You have been at work two years trying to get the

records?—Yes; we first had to organise the clinics after securing permission from the hospital authorities. This delayed the collection of records.

Up to the present how many worth while records do you think you have got?—Not more than 200 scattered about among the various clinics:

Two hundred continuous cases?—Continuous in each institution.

And the records in these cases would give the record of the woman for what period of years?—Our records provide for a follow-up for a year. We will not accept a case history unless the patient has been followed up for a year or has become pregnant.

And during that year she is supposed to be under observation?—She is supposed to come back within two weeks after her first instruction to see if she fully understands what she has to do. After that she comes back at least every six months for observation.

So far you have about 200 cases on hand in which contraceptives are in use?—Yes.

Those cases are only women in whose connection there has been a medical indication for the use of contraceptives?—Yes.

It is a very slow business collecting accurate records?—Yes. In New York we are limited in our intake, because we can advise patients only on medical indications. Our clinics are conservative about this, and that is why we need an authoritative pronouncement on medical indications. I may say that we hope to get clinics in other cities; for instance, in Philadelphia and Cleveland, where the State law does not restrict the

physician to medical indications. If New York breaks the way they will follow.

Supposing you had not this limit to medical indications, could you get your series of case records on a much larger scale and more quickly?—Yes; it is a matter of some irritation at the moment that the agencies (the Visiting Nurse Association, C.O.S., etc.) are constantly referring parties to our clinics whom our physicians are obliged to refuse because they fail to establish medical indications.

Because they are only economic or social?—Yes.

Is it generally known that hospitals are open for such a purpose?—It has been part of my job to promote this service. I go before the various organisations, describe our service, and ask them to send patients to us.

Can you imagine that this kind of inquiry could have been organised even by such physicians as you have on your committee in the absence of a paid skilled secretary who would organise it for you? Would that be a likely thing to be able to do?—I think it would be difficult if not impossible. I have acted for years as the secretary of various committees of physicians. As a rule they will not agree to serve on a committee unless you assure them that you will do all the detailed work.

So that these records would probably not have been obtained unless there had been a tremendous number of personal interviews with the staffs of the various hospitals? No.

Then I think, to summarise your evidence, the first point is that there is sparse evidence as to the methods of contraception, their efficacy, harm or harmlessness?—Yes, there is plenty of opinion but very little evidence.

And you think there is an urgent need for investigation as to the different methods from every point of view?—Yes.

Your committee, I think, were promoting investigation on biological lines?—Yes.

Has that gone very far?—No; there has been a study going on for over a year in connection with the Cornell University to determine the time of ovulation by vaginal smear. This investigation looks hopeful. We have been of financial assistance.

How is your committee financed?—Mrs. Pinchot has raised most of the money. Dr. Dickinson also raised some.

Has it been obtained from private subscriptions or as a result of public funds?—Both; we have had a grant for research from the Bureau of Social Hygiene.

Part of your money comes from subscriptions and part of it from this Bureau?—Yes.

How much does it amount to?—Our budget and expenses have increased from year to year. Last year we spent around ten thousand dollars. The budget next year is much more, because about fifteen thousand dollars for research have been included.

Your main point is the need for investigation, and your lack of belief in the data so far available as you have been able to find?—Yes. I would like to give a brief outline of the research undertaken. Our sub-committee on research consists of Dr. Robert T. Frank, Chairman; Dr. Herbert Evans of the University of California, and Dr. Stockard of the Cornell University. In general they plan to study (1) the time of ovulation, (2) the period and conditions of receptivity of the female, (3) sperma-

toxin. The studies planned and under way are: (1) Cornell University—the time of ovulation (no longer financed by C.M.H.). (2) Mt. Sinai Hospital, N.Y.—study of spermaphysiology, bacteriology, etc. (under way). (3) Dr. Arthur Curtis, North-western University—bacteriology of the cervix (planned but not under way). (4) Dr. Guyer, University of Wisconsin—spermatotoxin (under way). (5) College of Physicians and Surgeons, Columbia University—effects of lead on sterility. (6) Johns Hopkins—study of vaginal flora, etc. (subject to securing the necessary funds).

You have had to examine a good number of the statements made. Have you found any facts which support the idea in regard to the presence of the semen in the female, that the absence of that means a negative quality as far as health is concerned?—I have no facts at all to answer that opinion.

Do you know of any scientific evidence supporting the theory?—No. You may, however, be interested in hearing the opinion of French neurologists on this subject: “Little credence is apparently given in France to the ‘absorption theory,’ which is supported by some English physicians and others. Only two of the French physicians who gave an opinion on this subject appear to give it even doubtful consideration. ‘Does not believe in the theory, although some physicians give male glandular extract to patients whose husbands use C.I. or sheath’—38. (Numbers refer to names of physicians in key list.) ‘No proof of absorption theory, although it is possible. Has studied this question with no result’—26. ‘Can never be proved’—8. ‘Not considered at all in France’

—22. 'Does not believe'—19, 72, 41 (unmarried women healthy). 'Rot; virgins in convent are on the whole much healthier than average groups of women'—25. 'Of no importance'—28."

Have you told these particulars to Dr. Marie Stopes?—No. I visited England, France and Holland as an investigator, not to give information.

DR. SPENCER: Do I understand that you have only had 200 cases investigated from each of the reliable hospitals in New York?—We have only just begun. There are only about 200 cases altogether.

And how long have they been investigated?—Some of our clinics have just begun to function. In fact the Jewish Hospital clinic did not begin until September 15th of this year. Some clinics have been running for over a year.

MR. GIBBS: Dr. Bocker of New York says that a certain method is 100 per cent. successful. Other observers say that the same method is a failure, and recommend other methods which they say are reliable?—Dr. Bocker has left the Sanger clinic after some difficulty. She destroyed the records before she left.

Some statistics are very striking. An English authority used the veil and claimed 100 per cent. successes, and Dr. Bocker of New York, using a similar veil, reports 100 per cent. failures?—My committee do not feel that they can accept records unless they are gathered under authoritative medical auspices. When Sloane or Woman's Hospital produces a series of records you may not accept them as final, but you will admit that they are scientific records.

Do you know Dr. Davis?—Yes, and the statistics she gives are the results of a questionnaire sent out to a group of college women. The questionnaire included inquiries as to the contraceptive methods used and the success with each method.

Is Dr. Davis a physician?—Dr. Davis is not a physician, she is a Ph.D. She is the Director of the Bureau of Social Hygiene. She is an absolutely reliable person.

Second-class information based upon homogeneous or heterogeneous information?—It was a group of college women with more or less the same background or education.

Who analysed the statistics?—It was done in the office of the Bureau of Social Hygiene. I think the statistical analysis is absolutely sound.

The real question would be, were the data homogeneous?—The evidence may have been weighted by the fact that only certain types of women would answer the questionnaire.

Have you any experience yourself as to the details of these treatments?—No, as I am not a gynæcologist and the clinical work is strictly a gynæcological proposition, I have kept away from it. I have a committee on medical service, of which Dr. Holden is chairman, who teach the young clinic physicians what they should know in order to deal with the patients. We have occasional clinical conferences to discuss methods and results. We have prepared a special memorandum on methods from the available sources of information. (Copy submitted.) We give this to our clinical physicians for reference. We are

certain that revisions will be necessary as our clinical experience increases.

DR. GILES: Is there any definite schedule of points to be investigated and questions to be asked?—We have a detailed record form. (Document handed in.) I do not know whether you have ever had anything to do with getting physicians to fill up record forms. If you have, you will understand that it is a very difficult proposition. It is certain that not all the records will be complete.

Are these forms filled up with any accuracy?—Yes.

So that when you get a few hundred of these, that would be really data and not opinions?—That is our hope.

MR. BOND: In regard to the question of the Dutch clinics, we gather that they are not State-aided or financed?—No.

By what means are they supported?—It is now evidently changed from the original plan. The “practitioners” originally were given free training and paid by the League. Now they are compensated by the payments of the patients. They also make money by the selling of appliances, which they retail at 200 or 300 per cent. profit.

Now as regards the experience of the clinics in New York, they are limited to certain membership, but in regard to your experience you would say that contraceptive practices are going on on an enormous scale in New York?—Yes.

There is reason to know it is so?—Yes.

Then it means at present that the people from whom experience can be got are not going to the clinics either

because the clinics have not organised the inquiry, or because they are not in full swing yet. You are in a city where contraception is going on on an enormous scale and you have decided to inquire into it?—Yes.

In New York, by whom are these people instructed, if at all? is it by quacks or general practitioners, or how do they get their knowledge of contraceptive measures?—In all sorts of ways, as in every country. Every physician deals with it to a greater or lesser extent in his private office. There is a large clinic in New York run by the American Birth Control League, and drug stores sell equipment. The laity are well informed.

Can you issue literature under your law?—Our Federal Postal law forbids the mailing of literature dealing with methods.

You call yourself “Dr.” Sturges. Does that mean a medical degree in your case?—It is a medical degree. I am licensed to practise in New York and Ohio.

DR. CHALMERS: Will your questionnaire which has gone out enable you to answer the question whether neurotic affections develop in women who practise contraception?—It will work out this way. Our patients are just beginning to come back after their first six months. They revisit the gynæcologist, who makes an effort to ascertain if there have been any physical or other effects. If he suspects any mental or neurotic disturbance he may refer the patient to a specialist for an opinion.

Then, again, will your questionnaire bring out the fact whether fertility is being affected by the practice of contraceptive methods?—No, as they extend only over a period of a year.

There is no evidence on that point and you do not think you will get it?—It would require medical supervision over a longer period of time than proposed by our present clinical investigations. The study of a group of women who have practised contraception over a period of years and then tried to have children, compared with a group who have not used contraceptives, would also show something of the alleged effect of contraceptives on fertility. Some such study should later be taken up, but none is planned at the moment.

In any case these are diseased people and you are giving them advice for a temporary or a permanent sterility?—They are to a greater or lesser extent diseased. The methods we advise provide only for temporary sterility, as the patient at some later time may be in a suitable physical condition to bear children.

Is there any hope of getting an inquiry among perfectly healthy people?—We hope to start work later in other States where the law permits physicians to advise healthy people.

Have the gynæcologists said anything in New York?—Yes, they have expressed an opinion in answer to a questionnaire.

What is their considered opinion?—I cannot give it to you in detail offhand.

Generally were they useful or not?—No more precise than the information we got in England, France or Holland. There is a conflict of opinion.

DR. PORTER: The paper of instructions is given to whom?—To our clinic physicians.

Will they give instruction of this kind in the medical

schools?—So far as I know, little instruction has been given up to this time. Members of my committee are now being requested to lecture on this subject.

DR. DUNNETT: I gather that you cannot give us the consensus of opinion in New York. What you say is that there is a certain group of women to whom it is desirable to give contraceptive information?—Absolutely.

The opinion is being increasingly held among gynæcologists that it is wise to limit the families?—I do not know that their opinion is changing. They are franker about it now. We have just organised a sub-committee on medical indications. We were able to secure for this committee every specialist in New York we asked to help us, and you will know most of them. They are: Dr. Harlow Brooks, Dr. Nellis Foster, Dr. W. W. Herrick, Dr. Foster Kennedy, Dr. Nathaniel Libman, Dr. Philip Van Ingen. This will indicate that the medical profession recognise that this subject is important.

In other words, contraception will be a definite measure in therapeutics concerning the health of the woman?—As a minimum.

It is really getting a place in therapeutics?—Yes.

Is it desired by your committee sooner or later to obtain the distant results of all these things because it is important to obtain the opinion after a lapse of years?—Yes, I think eventually they would hope to do that.

Meanwhile your results will only deal with one year's experience?—Yes.

Will those results be available for this Committee?—Yes, but it will be some time before we carry any weight.

I think that evidence from your own clinics would be easier to obtain.

Supposing a similar scheme of investigation is proposed to be organised in this country, similar to the one you began in New York, is it likely that our hands might be joined and that some joint effort might be made to get half the data from this country and half the data from New York?—Yes.

Is it possible to make the attempt a joint effort?—I think my committee would be delighted with the thought of any co-operation.

Meantime, until these places have been in operation several years, your opinion is that the result of the examinations must be suspended until you get the necessary number of details?—Yes.

Do you think in our clinics that we have as much material as you have in New York?—Certainly, and you have no law to interfere with you.

DR. CHALMERS: With regard to the instructions to doctors, do you find any difficulty in putting those instructions into operation?—Of course that is the question. Can the stupid women carry out the instructions? Will lazy and tired ones take the trouble? We do not know. We are trying to secure clinical evidence of experience with the various mechanical methods. Our biologists may meanwhile discover a better method.

THE CHAIRMAN: We wish to express our gratitude for the evidence of this witness and the insight she has given us of the only initial attempt towards a scientific investigation.

IV

PRÉCIS OF EVIDENCE OF MRS. G. M. COX, M.B., B.S.,
Medical Officer, Walworth Women's Welfare Centre
(Birth Control Clinic).

This Clinic was opened in November 1921 by the Society for the Provision of Birth Control Clinics. Over 7600 patients have attended. Records are kept, and contact with patients is maintained by post.

Type of case.—Mothers of families whose total income averages between £2 and £3 a week; and wives of unemployed.

Clinic routine.—Each patient has a gynæcological examination by a doctor, who also fits the pessary in suitable cases. Instruction in manipulation of the pessary is given by the Clinic nurse. Personal hygiene is emphasised.

Patients are asked to return every six months for gynæcological examination by a doctor, and to obtain a new pessary. Certain cases are first referred to hospital or private doctor for preliminary treatment of abnormal local conditions.

A. Methods used :

1. *Dutch Mensinga pessary* in large majority of cases.
2. *Dumas pessary* (special cases).

N.B.—Both these pessaries fit into the vaginal fornices, and therefore do not grip the cervix. Lactic acid ointment is used for smearing on the rim of the pessary.

3. *Soluble medicated pessaries*—in special cases, either alone or in conjunction with an occlusive pessary.

4. *Condom*—in special cases.

Medical reasons for exercise of conception control :

B. Cases sent to the Clinic from Hospitals, General Practitioners, Tuberculosis Dispensaries, Infant Welfare Centres, etc. include the following conditions of ill-health of the mother or of hereditary disease of either parent :

1. Heart disease.
2. Kidney disease.
3. Tuberculosis.
4. Contracted pelvis, necessitating repeated Cæsarean section.
5. Debility from excessive child-bearing or repeated abortions.
6. Epilepsy.
7. Recent puerperal insanity.
8. Intermittent insanity.
9. Chronic alcoholics.

C. Effect on health of *sexual abstinence*, partial or complete, in married life.—Evidence of nervous irritability and depression on the part of the husband.

D. "Safe period."—No evidence of an absolute "Safe period."

E. Effect of use of various contraceptives on—

- (i) Subsequent fertility.—Evidence that use of occlusive pessary does not diminish fertility :
- (a) Pregnancy following without delay on discontinuing use of pessary.
 - (b) No reports of subsequent sterility.
- (ii) Health.—No evidence whatever of any injury to health from the use of contraceptive methods advised.
- (a) Marked improvement in mental health from the removal of the constant terror of pregnancy.
 - (b) Better relations between husband and wife, leading to increased happiness in the home.

THE CHAIRMAN (Mr. Gibbs) : We are very pleased to have the presence here to-day of Mrs. Cox and Mrs. Robson. Dr. Cox is from the Walworth clinic and Dr. Robson from the Cambridge clinic, and I think it would be your wish that we should ask Dr. Cox first. We have a précis of her evidence before us, and perhaps Dr. Cox would like to go through the précis and emphasise any point, and you can supplement her remarks by any questions ?

MRS. COX : Shall I take my précis as read ?

THE CHAIRMAN : Yes.

MRS COX: You will notice the type of experience I have had. I am a medical officer of the Walworth Women's Welfare Centre, that is, the birth control clinic at East Street, Walworth, which has had experience extending over five years. The Centre was opened in November 1921 by the Malthusian League. In 1922, control was transferred to a separate committee from which the Society for the Provision of Birth Control Clinics subsequently developed. Since the opening of the Centre over 7600 patients have attended, of whom records are kept and contact maintained by post. It is obvious that with that number of cases one would expect to get definite evidence of any ill effects, sterility, and so on, caused by the methods used. I point out the type of cases are the mothers of families whose total income averages £2 or £3 per week; many are the wives of casual labourers or the unemployed. Many seek help on economic grounds, such as poverty and overcrowding in the slums, and a large number are sent for advice on medical grounds. I might also say that a point is made of insisting that each patient should be seen and examined by a doctor. That is one of the rules. The doctor advises suitable contraceptive methods after a gynaecological examination of each patient. In the majority of cases the occlusive pessary is advised, and this is fitted by the doctor, and instruction in its manipulation is given by the clinic nurse. I have been quite surprised at the readiness with which these women learn to use it. The women are taught to identify the cervix, and they are asked to return in a week's time with the pessary in position, to see if it is properly adjusted. I think the

difficulties have been over-estimated, as I have been astonished at the quickness to learn. Then there is the question of the personal hygiene. We do impress upon them the necessity for cleanliness and the dangers of abusing the methods by leaving the pessary in position too long. I warn the patients of the danger of leaving the pessary in position longer than twelve hours, in fact I advise as short a time as possible. Then, again, I ask them to advise me at once should there be any discharge or other symptom arising through the use of the pessary. The patients are asked to return every six months for gynecological examination by the doctor and renewal of pessary where necessary. Certain cases are first referred to the hospital or private doctor for preliminary treatment of abnormal local conditions. I advise the use of lactic acid douche in mild cases of leucorrhœa, and it is found to be very effective in clearing up discharge. A card of instruction is given to each patient which contains the following points :

(1) Please return in a week's time with the pessary in position, so that the doctor can tell you if you are placing it correctly.

(2) The pessary, when new, is round, but tends to get out of shape. Gently press into a round shape before use. Take care not to be constipated; if you are, the pessary is liable to fail.

(3) Always smear the rim of the pessary on both sides with lactic acid ointment before use.

(4) Never leave the pessary in for more than twelve hours.

(5) Syringe before you take the pessary out, with at

least a pint of warm soapy water. Clean the syringe. Take out the pessary and syringe again with some fresh warm soapy water.

(6) After use, wash pessary and powder it with French chalk.

(7) Do not use the pessary if the rim has snapped.

(8) Patients are asked to report back to the centre every six months.

THE CHAIRMAN : The equipment would be provided by the clinic?—Yes, the equipment is provided at the clinic. I have brought here samples of the pessaries in use so that you might examine them. Here are two different kinds, the Dutch Mensinga pessary and the Dumas pessary. The Dutch pessary is used in the large majority of cases, and there are about fifteen sizes, fifty to ninety mm. diameter. The rubber ring, enclosing a flat watch-spring, fits into the vaginal fornices, and it is closed by a thin rubber diaphragm. The Dumas is in two sizes and is of solid rubber. In each case ointment is used for smearing round the rim.

DR. SPENCER : What is that ointment?—Two per cent. lactic acid in a soapy base. Previously quinine was used, but we have discontinued that.

And the douche?—That is ordinary soapy water.

THE CHAIRMAN : On the point of the pessaries, how do they wear; do the watch-springs frequently begin to show?—We have had patients come back at the end of three years, and we have never found the spring worn through the rubber rim; the pessary is in many cases in good condition. Sometimes the watch-spring snaps, and the pessary has to be renewed on that account.

You have not experienced any trouble with regard to the watch-spring?—No, we have never had a case where the watch-spring has worked through the rubber. I think you will find in a recent book some criticisms of the watch-spring, which it is said might work through and injure the woman. I might add that I cut open one of these rubber rims and exposed the watch-spring to the atmosphere for a year, and there was no sign of rust. We have not had a single case of the watch-spring coming through the rubber.

How much are these pessaries?—We sell them at *2s. 6d.* each and the Dumas at the same price. If they are bought elsewhere they cost *7s. 6d.* I want to make the point that they are not cervical caps. They do not enclose the cervix or grip it, but fit into the vaginal fornices like the ring pessary used for uterine prolapse. In the majority of cases the woman has had several children, and I do not see how in these cases the cap can be made effective to grip the cervix. In the majority of cases we use the Dutch pessary, and we use the Dumas only when there is a lax vagina. In cases where it is impossible to fix them properly, we advise that the husband shall use the sheath, and we supply those at the clinic. We have cases sent to us from hospitals, from general practitioners, tuberculosis centres, infant welfare centres, etc., which include many conditions of ill-health of the mother or of hereditary disease in either parent. In regard to the effect on the health, we find that abstinence is not good. The women complain that their husbands become very irritable and there are frequent quarrels in the home. Patients report that partial

abstinence leads to irritability and depression in their husbands and some desire to resume marital relations on that account. In regard to the safe period there has been no systematic investigation made, but there appears to be no evidence of a definite safe period. Then there is the question of the effect of various contraceptives on subsequent fertility, and I say that there is no record, during the five years the pessaries have been in use, of sterility being caused. In many cases pregnancy has followed the disuse of the pessary where another child was desired.

THE CHAIRMAN : On the positive side you have had cases where, on cessation of contraception, pregnancy has taken place?—We have had many cases. With regard to health there is no evidence whatever of any injury to health from the use of contraceptive methods advised. I have made careful inquiries of the medical officers and the superintendent, and there is no evidence of a single case.

Would you like to limit that by saying among those who use the methods you advise?—I am speaking only of the patients at the clinics, who are following methods advised by us. Perhaps the most striking feature is the marked improvement in the mental health of the women through the removal of the constant terror of pregnancy. All who have worked intimately among the poor must realise what a real thing this terror is, and to what a pathetic mental and nervous state the women are reduced after years of such anxiety. I might say that we are frequently assured of the better relations between husband and wife and of increased happiness in the home. I

should like to read a few extracts from letters which we have received from patients; but first I would like to read an extract from one of our doctors' reports.

"As far as health goes I have found that any change in our women has been for the better, being most marked in their mental condition. I have certainly not found any deleterious effect on their general health, and although I have just lately been looking for signs of vaginitis at return visits I have been unable to find any. Nor, so far as one can tell, is there any congestion of the cervix or body of the uterus. I think the main points to be emphasised are the happier outlook of the women as well as their increased affection for existing children."

Dr. Butler assured me that she found the same condition of affairs. I think the letters I have are interesting. There is one from a South London mother who says:

"I am more than thankful for the advice received. I have been feeling much better in health since visiting the centre."

One from Finsbury says:

"Personally, we are very grateful for the advice, and I must say that my wife has been in better health since using the appliance."

There is another letter here:

"How I thank you for your kind interest in me and the help I have received owing to you. After having had seven children so quickly I began to lose all heart and to wonder whether life was really worth living. Now everything has changed. I seem to love my children more and all my duties."

Another writes:

“ My baby will be two next month and I am in splendid health, partly owing, I think, to the lessened anxiety.”

Again :

“ Since I knew of the Centre my husband and I have lived much more happily together, as I am no longer continually worrying about having another one.”

These are the extracts from various letters we have received. Then I wish to hand in the case card [produced] which is in use at the clinic.

THE CHAIRMAN : Dr. Fairbairn wishes me to ask the witness two questions. The first is : Does your Centre inquire into the circumstances of the applicant for advice and the reasons for seeking it, or are instructions on birth control given to everyone applying, regardless of questions of age, how long married, whether there is any family or not?—I think you will see from the various case cards that various questions are asked as regards health. The committee take the point of view that the woman herself should decide whether she should have more children, and the ultimate decision is left with her. The patient's age, duration of marriage and number of children are stated on the card.

DR. SPENCER : What reply do they give to that? have you any means of ascertaining whether they are actually married?—We do not ask them to bring their marriage certificates with them, we have to take their word. [In my experience I had one case of a woman who was about to be married who came up for advice, but I asked her to return after a suitable interval.] I point out the advantage of having children when young. The clinic offer advice to married people only, and if they knew that the

woman was not married, nor about to be married, they would refuse to give the advice. There are a large number of patients who come with their babies, and there is little doubt as to the type of woman we are dealing with. We certainly do not get the prostitute class, if that is what Dr. Fairbairn means.

If you have any suspicions in regard to anyone, you would still accept their word; supposing your suspicions were aroused by the appearance of the girl or for any other reason?—Well, they come wearing a wedding ring and they say that they are married. Moreover, they are required to give their address and to state their husband's occupation. I have had no case that has aroused my suspicion.

Then we may put it that the number of cases where you would be suspicious are negligible?—Absolutely.

You deal with what seems to be the bona-fide married?—Yes. I think it is hardly likely that those other people would come to our clinic. There are plenty of other sources of information for them.

Then Dr. Fairbairn asks: Is the experience of your Centre the same as that of the American committee on maternal health, as recorded by Dr. Dickinson, that the results attained are successful with the more intelligent classes and the failures high amongst those of low intellectual level?—Our results have not been classified. Obviously with the use of this pessary a certain degree of intelligence is necessary, and it takes time to teach the patients. They are anxious to learn, and we find on the whole that they learn very readily. In the whole of my experience I have had only one case which was unteachable, and in that case I advised the soluble pessaries

and the use of the sheath. We have had extraordinarily few who have proved unteachable.

Your folk are not really mental defectives?—They are certainly not.

The ordinary artisans' wives?—Yes.

DR. SPENCER: I see that over 7000 patients have attended and records are kept?—Yes.

How often are those records obtained?—They are asked to report every six months. If they do not do so we write to them. I cannot give you the figures.

Have you any idea as to how many people do come back?—I think it is the majority.

You say that you have not had many failures, but you do not say how many failures?—I cannot give you the figures. One must not assume that cases are successful when evidence is available only for a short period. It means more than three years before we can draw deductions. I have been astonished at the certain success of the methods with the fertile type of woman who was previously having a baby or an abortion every year.

You say that you have had failures, but you do not say how many failures. Do you mean to say that they fail despite the regular use of the pessary?—We have had cases of failure, and I have found in many cases that they have neglected to use the douche. I have found also another cause of failure. These women are asked to return in one week's time to see if they can use the pessary rightly; and I have found that some of them have put it in front of the cervix. I always point out the danger to each patient. This fatal error is fortunately rare. It is not difficult to feel the cervix through the soft rubber.

You say that each patient is gynecologically examined

by a doctor?—There are three doctors at the clinic, and the examination is carried out by whichever doctor is on duty at the clinic at the time.

Does the doctor always fit the pessary?—In every case; that is the invariable rule.

The first time?—Yes, the first time. The actual instruction is left to the nurse.

I take it that a few patients actually become pregnant notwithstanding the using of pessaries as you advise. Then they would naturally become indignant and call on you? I would imagine they would come back and be rather indignant. My impression is that the women would come back and say “Why is this?” They might also say, “I have done as you told me and I am now pregnant.”—No patient is ever led to believe that we have an infallible method to offer.

I really do see some difficulties in the fitting of the pessary so that the semen cannot get round it?—I have been surprised at the results, at the fact that it has proved so effective. I might point out that I was brought up in a critical school and I was quite aware of all the objections. I came to the clinic in a critical frame of mind, and I have been astonished at the success of the methods and the improvement in the health of the women. I do not pretend to explain how the pessaries act. It seems to me that our methods are imperfect, and I feel that we are in need of proper research in these matters. Of the fact that we are doing excellent work in the slums and working-class neighbourhoods I have no doubt.

DR. PORTER: You are perfectly convinced with the people who come to you that there is no attempt by

anybody to get information from you for improper motives; that they are really all mothers of families with money averaging £2, £3 or £4 a week?—Yes; but of course to be absolutely certain one would have to have health visitors going to the homes and seeing the marriage certificates, etc. How are you otherwise to be sure? A poor woman comes up with a young baby in her arms and a toddler clinging to her skirts, and she has been recommended to us by a neighbour. A prostitute would not care to come to a clinic; she would go to the rubber shops or some less public source of information. That is what it appears to me. We certainly do not get that type, and if any of you have any doubt, come to East Street and see the type of woman. It certainly does not attract the prostitute.

They are not trying to get information for an illicit purpose?—I have never had my suspicions aroused. There are so many other sources for the knowledge they require, so why should they come to a public clinic? Then, again, there is literature on the market. I do not think it likely that they would go down to a slum birth-control clinic when there are rubber shops, literature, and other easy and private sources of information.

DR. DUNNETT: It seems to me that the only class of woman who might be noticeable would be a woman who has not borne children. If she was a young and fairly respectably dressed woman who came to you and said she did not want children, would you give her treatment or not?—The committee who run the clinic have laid it down that the woman herself shall decide that point, as long as she is married; and if she considers, on

economic or health grounds or because she is going abroad, she should not have any children at present, then the woman is allowed to decide for herself. I make the point of trying to prevail on her to have the children while she is young.

THE CHAIRMAN : The discretion is left to the medical officers?—Quite. The general principle is laid down by the committee, but the type of contraceptive to be employed is left to the discretion of the medical officer.

From the point of view of the welfare of the woman to deal with it on its merits?—Yes.

DR. PORTER : You can refuse if you desire?—Yes, on medical grounds alone.

THE CHAIRMAN : The committee does not overpower the medical officer?—The medical officer accepts the principles laid down by the Committee.

DR. DUNNETT : You have handed in a copy of your cards?—Yes, and I should like to say that our case cards alone make interesting reading. You will find that the women are sent up from the various hospitals suffering from diseases. A large number of the cases are sent up for medical reasons.

Your most popular pessary comes from a chemist at —, so that a smart young woman could see the name on the pessary and go to that chemist?—She certainly can buy one if she likes.

It would be better if the name and address were not on the rubber?—You realise that there is no difficulty in getting pessaries. What about the rubber shops with their window displays; one could not have a better object

lesson. What about the various sponges, soluble pessaries, etc., which are all shown in the shops? Personally I am not impressed with the danger of these poor women spreading the knowledge among smart young women.

DR. PORTER: Why could you not get these made for yourselves?—The point is that these must be fitted by the doctor, otherwise they may be useless. It is hardly likely they would go to the chemist and pay 7s. 6d. when they can come to the clinic and be properly fitted.

THE CHAIRMAN: You get a certain number of cases sent to you from the hospitals and so on?—Yes.

This bears on the question of the condition of the population from the hospital point of view. What proportion of your people are these defective cases with very lacerated cervices? I want to know what is the proportion of damaged people?—The majority of the patients have lacerated cervices, as one would expect in women who have borne children; but the proportion unable to be fitted with a pessary is very low indeed. I put it at about five per cent. or less.

Then you agree as to the need for further research?—I very strongly agree with that. Obviously our methods are very imperfect, and I feel that something must be done to help these poor people. I disapprove very strongly of the cervical cap pessary.

Then there is the name of the chemist on the pessary?—I might say that the name and address on our pessary wear off very quickly. I do not see why the people should trouble to go to the chemist at — and pay 7s. 6d. when they can come to us and be properly fitted

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by a doctor, which is an essential point with this type of contraceptive.

It is not the prostitute I am thinking of, it is the flapper.
—They do not come to the centre.

Of course they do not, but they can get the information which is provided by this address?—Why should they assume that this is better than other information which is now freely at their disposal?

V

DR. ALICE S. L. ROBSON OF CAMBRIDGE BIRTH CONTROL CLINIC

DR. ROBSON: I really have not much to say, and I endorse all that has been said by Dr. Cox. I have a few statistics that I have made out from the cards. May I begin by saying that this centre at Cambridge has only been open thirteen months, of which we were closed for three weeks. Dr. Pritchard, a lady medical, was in charge for nine months, and I have taken over from her. There have been a total of 201 cases in the year, and of these 29 have been recommended by doctors. It is not a very large proportion, but the proportion is increasing as the doctors in the neighbourhood become more familiar with the place. Twenty-four cases were already pregnant, and these we asked to go on to the ante-natal centre. Then you were asking the previous witness what number had the cervix lacerated. A number of these were put down as lacerated and others as slightly lacerated. I have only Dr. Pritchard's notes on the cases, and sometimes they are not very full, so that of these there were 32 who can be put down as having their cervix lacerated.

THE CHAIRMAN (Mr. Bond): That is, out of 200?—Yes, and there were 17 cases where the uterus was retroverted and attempts at replacement had been made. Three cases referred to hospital were wanting treatment ;

101 cases were fitted with pessaries and 52 people took sheaths—many of them took sheaths in addition to the pessary. The reasons why some of the patients were sent to us by the doctors or the hospitals were: in two cases the husbands were suffering from tuberculosis and had just returned from a sanatorium; one case where the husband had been in an asylum and had been returned as cured; one disabled man who was in and out of work, and one man who had shell shock with loss of memory. In all these cases it is not a case of the woman not having children. They had all had children by these husbands, but they felt that they should not have any more. One woman had a deformed pelvis; one had diseased kidney; one had double hernia; one case had had puerperal septicæmia after the last child; one was sent by the doctor because she had valvular disease of the heart; one the doctor wrote that the woman had had a severe form of anæmia, resembling pernicious anæmia; and one doctor wrote that the woman was suffering from bronchitis and he recommended that she should have time to recover before she became pregnant again. Then I thought you would be interested in the economic side of the case. Thirty are put down as labourers, and I find that these always have the largest families.

You draw your population from the country?—From the town principally, but the people in the rural parts are beginning to come in. Then we have very great difficulties at present with the women living in rooms, either in the house of their parents or else in lodgings, and there were thirteen cases where people lived in single rooms and where there were already one or two children, and in two

cases the mothers told me that they would be turned out of their rooms if there were any more children. Two or three cases have come to me and have stated that they wished to use birth control until they could get into a house, so that they might have their child in comfort.

That would make fifteen due to housing conditions?—Yes, and you might add ten where the husband is unemployed or not in regular work. I thought you might be interested to hear how many children there were among the women: 27 had one child; 31 had two; 42 had three; 32 had four; 16 had five; 15 had six; 9 had seven; 4 had eight; 3 had nine; 2 had ten; 1 had eleven; 1 had twelve. Two women have come to the Centre because they had no children, and they wanted to be examined and information given them as to whether it was possible for them to have children. In both cases I sent them to the gynæcological department of the hospital. May I emphasise what has been said by Dr. Cox about the peace of mind? So many of the people say they now have peace of mind, as they no longer have that dread fear of pregnancy every month. I have no statistics about the use of contraceptives as bearing upon the subsequent pregnancy, but I have been talking to various friends who have told me their experiences, and there is one particular case I know of where a woman had three children in three years, and then she used contraceptives for fourteen years. She ceased using them as she thought she was old enough to be safe, but she became pregnant, which does not look as if the use of contraceptives has any effect on subsequent pregnancy.

In that case at any rate?—I have only that one case.

I have had no complaints from those who have come back to be examined by the doctors that they have felt any discomfort through the use of the pessary. In every case they have said that it has been successful, but it is, of course, much too short a period from which to draw conclusions. We use exactly the same methods as the last witness because we were brought up on the Walworth methods. We use the same cards and the same pessaries, and the majority of the women use the Dutch pessary and not the Dumas, and as far as I am concerned in all cases I have been able to fit the women with a suitable size. One or two women have taken large sizes and one or two have taken the small sizes.

DR. DUNNETT: Do you sell the ointment?—Yes, and the lactic acid in the same way as Dr. Cox. A nurse instructs the women in the use of the pessary, and the doctor sees each one again before she leaves, to make sure that she has learned correctly and can put it in properly, and in only one case had we any difficulty. That was in a feeble-minded person, a border-line case of feeble-mindedness, and she took a long time to learn, but the nurse was very patient with her, and the woman came back the next week having fitted it in correctly, and as far as I know she is using it all right, but I have not been able to find out.

DR. SPENCER: The number of your cases is very small, and there is no statistical evidence as to the results?—No, we cannot give that.

And your experience is limited to three months?—Yes, my experience.

DR. PORTER: Would it not be a case that at the estab-

lishment of a Centre of this sort, the only cases at first would be those sent in by the doctors?—Well, it has been the other way about in Cambridge. They have told me at the Centre that more cases have come from the doctors during the last four or five months than they had had previously.

How much do you pay for these pessaries?—They are bought wholesale and we sell them at cost price.

Do the people really obey the instructions and keep it in no longer than twelve hours?—Yes, so far as I know.

DR. COX: I make a special effort to warn them of the danger. The point is that they can put it in when they go to bed at night, and they can leave it in until the next morning after breakfast, when the children have gone to school, and then they can take it out. These women are anxious to obey every instruction, as they are absolutely desperate. There is the case perhaps of the woman who has had eight children and she is living in one room, her husband is unemployed; there are deplorable conditions, and they come to you desperately anxious and crying. They have said to me that they will kill themselves before they have another child.

DR. PORTER: Would that not be that they were brighter because there was somebody on whom they could place the responsibility, there was someone they had who could tell them?—There is the removal of the responsibility.

DR. COX: I feel that I am in some way representing these women, and I have the duty of seeing that their case is properly put. One hears the remarks about wanting to have more children in life; why, their lives

are such that they are beasts of burden. We should never allow our animals to live under the conditions some of these women have to.

DR. ROBSON : I went to the Centre fearing very much that the wrong people might come for the information, but the people who have come are not the wrong people. They are the people who need the information badly, and my sympathies are strongly with them. For many years I have been doing infant welfare work, and many times I have wished that I might give information on birth control; but so long as the Ministry of Health were so against it, I felt that I was not justified in doing this so long as I was taking public money. I thought at first that some young unmarried girls would come to the Centre, but none have come. Cambridge is a small town, and we have been able to trace the homes of most of these people and we know about them. Many of them are personally known to me, who have come to me in the Infant Welfare Centre time after time with one more baby, and getting more and more broken down. I have longed to help them, and now I feel that I am justified in telling them: "Come to me at the other Centre and I will do what I can for you."

THE CHAIRMAN : What has been the genesis of your Centre at Cambridge; how did it come about?—It is entirely voluntary among the young intellectual men and women of Cambridge, who felt that this information should be open to women of all classes. It did not seem to be open to the women of the poorer classes who needed it. Young intellectual women, many of them wives of the junior "dons" at Cambridge, had the knowledge, and

they felt it was right and proper that the other women should have the benefit. That is the way in which it arose, and we have many of the doctors in Cambridge in sympathy with us; there are a certain number who are not. I have been surprised at the number of doctors who have sent cases to us.

DR. DUNNETT: May I suggest that you do make statistics and follow up the cases when they do come back again?—Yes, that is what we mean to do. We want to have all the statistics so as to answer all our critics.

VI

DR. WINTER OF WOLVERHAMPTON BIRTH CONTROL CLINIC

THE CHAIRMAN (Mr. Gibbs) : I understand Mrs. Winter of the Wolverhampton clinic is here and prefers to be examined now. You belong to the Wolverhampton clinic?—Yes.

Are you a doctor?—I am a medical officer.

Will you tell us about this clinic; is it voluntary?—It is: It is a voluntary arrangement on the lines of the Walworth clinic. We started in May of last year and we have a clinic once a week.

Who started it; the local people?—Yes.

Is it under a local committee?—Yes, under a local committee.

Who defrays the expenses?—They do; they are making a special effort.

You are the medical officer of the clinic?—Yes, I am the medical officer of the clinic.

Perhaps you will tell us what you have been doing?—I think we do the same as the Walworth Clinic. We use the Dumas and the Dutch pessaries. We use the Dumas, which are of two sizes, and we use the Dutch, which are of all sizes. We started using the Dutch at the beginning, but we have come down to the Dumas principally, as we found in the majority of cases that they seemed to suit them better.

Do you mean more comfortable or more efficient?—More efficient. The only objection I have is that we do not know what the effects may be. Our patients come to us every six months, and they are examined then to see the state of the cervix.

Meantime will you tell us whether the Dumas cap is worn the whole time, without being taken out?—It is removed the day after use.

And the woman herself can do that?—Yes, she is instructed how to do it, and then she makes a return visit in a week's time to see if she has remembered the instructions.

And see if the cap is in position?—Yes, to see if the cap is in position.

Do you come across any cases where it is left in for a long time?—So far, no.

Have you had any cases of inflammation or any trouble?—No, I do not fit them if the cervix is not in a proper condition. If there is a discharge they are treated with lactic acid, and if they are too bad they are sent to a hospital with a note from me.

Will you tell us how many women you have treated in this way?—There have been four hundred cases during the past eighteen months. In fact, there have been five hundred including the Hednesford district.

How are they brought, by advertisement or otherwise?—They have meetings similar to the ones at Walworth—drawing-room meetings and small meetings in different halls. We have had people coming who have been recommended by friends.

Do you charge anything?—We charge a shilling consultation fee and the price for the apparatus.

Do they pay again when they come?—No, we find they will not come if they have to pay for a second attendance.

Do they all come a second time?—Only a few do not attend.

Have you the records of the four hundred cases?—Yes.

When did you begin?—In May 1925.

During that period since May 1925 have you had any cases where the women who have attended during the earlier part of the clinic become pregnant?—Yes.

The percentage might be higher owing to the relative inefficiency of the early method, or it might be higher because the period is longer?—I now think that more should have been fitted with the Dumas instead of the Dutch cap.

You think that the Dumas method is better?—Yes.

What age of women come?—From twenty-one to forty-six years.

Do you make any distinction as to whether you treat them or not? do you have to refuse treatment?—No.

You think that the present appliance is the best?—Yes. I do not think it is satisfactory from a medical point of view, but from an economical point of view; they have all been cases which should have been treated differently.

You ask them why they come?—Yes.

And supposing a young woman came and said she did not want to have any children although she was fairly well off, what would you do?—We have had no cases like that.

You think they were all economically desirable cases?—Yes; we have only had two cases of young married people who have had no children. One was tubercular and the second one was the wife of a police constable and she could not get a house.

One was a medical case and the other was an economic case?—Yes.

And in both those cases you gave advice?—Yes.

And did you apply the apparatus yourself?—Yes.

With regard to the other 498 cases, how many children had they?—I think the average was five. I had one woman with twelve children; I do not think that we have had more than that.

What age was she?—Forty-two.

Did you think it necessary to apply the pessary to her?—Yes.

Do you have a considerable proportion of young women with one or two children?—No.

Would you say that most of them had had large enough families already?—Yes, I think most of them had five.

You think that that was the chief reason for them coming; they had had four or five children?—Yes, and that they were not able to afford any more.

MR. GIBBS: Have you ever seen a check pessary in position in the vagina after sexual intercourse, and if so would you be surprised to find just as much semen above the pessary as below?—I always advise the use of quinine or lactic ointment.

Do you think that the pessary would be equally efficient without the ointment?—I think it should be. I

prescribe the ointment in every case, but I think it is necessary only in cases where the cervix are very large or have been torn in previous pregnancies.

Do you put the majority of the ointment above or below?—Above.

What is your treatment?—We have the ointment, the pessary and the soluble pessary. I prescribe the soluble pessary and ointment alone in certain cases, and in others I prescribe the pessary with the ointment.

If you put a pessary up the vagina and place it in position, the natural movement of respiration and the movement of sexual intercourse will ultimately leave that cap in the long axis of the vagina, so that if you put your finger up the vagina there is a distinct space between the wall and the check pessary. Have you found that?—No, but I have only examined it before use.

I have seen half a dozen people lately who have used it, and have come to see me the day after intercourse so that I could examine and see what had happened. All those people who have come to your clinic, or the majority of them, have been healthy people? Your treatment is for the prevention of children in healthy people and not in diseased people?—I have had two with gonorrhœa, and there are a number, of course, who have various complaints.

Have you any experience of contraception with chemicals, chemical injections or ointment?—No; the lactic pessary has been tried in many cases, and they find that it is satisfactory only for a short period.

The old-fashioned Rendell's pessary, have you found that satisfactory?—I do not know about that.

Do you recommend the condom? Have you any correspondence with men in regard to them?—No.

The class of patient whom you treat, it would hardly be possible to prescribe the condom?—I sometimes prescribe it for a short period.

What is the difference between the Dumas cap and the Dutch cap?—The Dumas is a small rubber pessary and is satisfactory in most cases.

DR. GILES: You do not make any distinction or keep any record as to whether the cases are supplied with these things on medical grounds or not?—We keep a record of the size of the family and the mother's state of health at the time. I am afraid we do not decide whether they ought to be fitted or not.

Anyone gets one?—Yes.

There is nobody to exercise any judgment or advice?—Not in our clinic at present.

Though you state that they are all economically desirable?—Only the patients I have seen.

How came you to ask the question on the economic side if no decision has to be made on that point?—I think it was the idea of Mrs. Gordon, the Secretary, who started the clinic. I might say that she is greatly interested, and she goes from house to house visiting periodically, and questions these women who attend.

DR. GILES: Do you think it is a good thing for every woman who wants to be fitted with a pessary that she should use that contraceptive without any inquiry about her?—I do not think so, but I do not see that we can do otherwise at the moment, as there are no rules or regulations regarding patients who attend.

But you are the medical officer?—Yes.

Cannot you exercise your discretion?—I have had no cause to refuse so far.

SIR ARTHUR NEWSHOLME: Why should it be easier in the child welfare clinic to exercise discretion any more than in your clinic?—I should treat only cases who were medically unfitted. I do not think that I should deal with the economic question.

DR. GILES: There is the question of the cheap food. I suppose that all these women could go into the child welfare clinic and get this food at cost price?—Yes.

Instead of having contraceptives supplied they could go there?—Yes; but I think that they come to us from an economic point of view. I must say that I have never refused any of them.

DR. BOND: Are there any rules from your committee which limit the discretion of you as the medical officer, or are you quite at liberty to advise for or against? Are there any written instructions or rules which bring pressure on you in the way of treating cases?—There are no rules.

It is left to your discretion?—Yes.

You mentioned a very small number of cases, only two. Can you give any indication as to the number of these difficult cases; say the proportion of the cases which have a lacerated cervix which prevents your giving proper treatment? What are the number of cases in proportion to the number you have treated?—I have fitted everybody with the exception of about four out of four hundred.

What is in your mind in regard to the possible failures,

because sometimes the people after the treatment become pregnant, and if that is so they will not come back? Have you any cases in which the woman has come back and has said that it is all a fraud, she is pregnant?—Yes, I have had quite a few.

How many have you had?—I should think of the five hundred not more than twenty.

Is that based on records?—On the records which I looked up before I came here to-day.

DR. SPENCER: How many of the five hundred have not been back?—They have nearly all been back.

How long afterwards?—Six months.

You keep a record of all patients?—Yes.

And out of that number about twenty have come back saying that they are pregnant?—Yes.

SIR ARTHUR NEWSHOLME: Do you think in addition to that twenty that other women have become pregnant after treatment by you, and they do not come back?—I do not think so, because our secretary visits them from time to time. A few of these twenty did not return, but she heard of them.

DR. DUNNETT: Do any mothers come to you for advice as to how they can become pregnant?—Yes, we have had them, and we have had them call with various complaints, and we have had to send them on to the hospital.

So that your clinic is also a sifting ground for sending women to the hospital?—Yes, and I have sent quite a number of them to the hospital.

You have sent them to the hospital, where otherwise they would not go?—I have given them the letters to the hospital.

You have only been in existence about eighteen months, and that is not time enough to enable the women to prove that they have kept free from pregnancy. Has any woman come to you and stated that she wished to have a baby?—Yes.

You praised the Dumas cap, and Dr. Cox preferred the Dutch pessary because she said that the Dumas cap was only made in two sizes, and it was very important that the cap should fit well, otherwise it might slip. Can you only get the Dumas cap in two sizes?—We use only two, but I understand that there are three sizes. We use the medium and the large sizes.

Is the large cap big enough to fit a woman who has had eight children?—The majority of the women.

Do you think a larger size would be better?—Yes.

You say that there have been twenty failures in five hundred women. Some of those cases have not attended for six months, and there are some cases you have not heard of during the six months. If we eliminate those, should we say there are about 450 or 400, to exclude the last five months? I take it that you have had fresh cases during the last five months' or six months' probation?—Yes.

Out of the other say 380 who have really been a success they have worn your cap and have not become pregnant?—That is so.

Do you think otherwise they would have become pregnant and would have had families?—Yes.

SIR ARTHUR NEWSHOLME: On what grounds do you think that otherwise they would have become pregnant? You have only about fifteen months to deal with.—I think so definitely because they had large families.

DR. SPENCER: Do you ever get the single women coming?—We have not yet had any.

Have you made any inquiries?—Yes.

Do you find that the women come to you soon after they have had a child to have pessaries fitted?—Yes.

Many of them?—Yes.

What proportion?—One-eighth of the number.

They are cases that come a few weeks after having had a child?—Yes.

I suppose you recognise that women do not conceive during the first nine months after having the child?—There have been a few who conceived in six months. I have known them conceive in a week, but it is very rare. They have worn a cap because they did not know definitely when they would be menstruating.

A considerable proportion of your women have recently had a child and they use a pessary, but that is hardly right to judge the advantage of that pessary?—Usually when they go on for twelve months without menstruation they come to see me.

About forty-five out of your 380 were at a period when pregnancy might not be expected?—That is over the whole period.

You state that if they have a discharge you do not fit them with a pessary. What do you do?—If it is mild we have lactic acid on the premises and we use it for a week, and then they come back and are examined. If the discharge is no better they continue for a month and I suggest the condom during that period.

If they have a discharge do you expect to cure it with lactic acid?—No; the women, of course, are sent by letter to the hospital if necessary.

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 ough to enable the women
 free from pregnancy. Has
 stated that she wished to

MR. T. A.

THE CHAIRMAN (Mr. Leonard Hill to question in Dr. Hill's laboratory. DR. HILL: Well, the influence of the vitamins the new vitamine, Vitam into prominence by the comparatively new vitamine by Dr. Evans' colleagues, is something like this: W synthetic food mixtures and protein, with proper etc., they grow well and health. Depending some of the diet, they sooner sterility is a dietary deficiency or prevented by a change involving the addition of high in a new food factor disease affects males and it eventually leads to the This is not the case with and ovulation are unimp a highly characteristic d resulting in the death and

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 e they had large families.

DR. SPENCER: Do you e liar character of this dietary coming?—We have not yet h by the producing and cure Have you made any inquiri aling with the specific sub- Do you find that the wom that have been fed since they have had a child to have et are mated with normal Many of them?—Yes. f the cycle and they become What proportion?—One-eig he young are rarely born, They are cases that come a f ually resorbed. In regard a child?—Yes. amine E, it is present in a

I suppose you recognise tha It is higher in the muscles during the first nine months body; it is present but There have been a few who k fat and cod-liver oil. I have known them conceive of certain plants, especially rare. They have worn a f which it is in lettuce, tea-leaves, definitely when they wou nd wheat. The wheat germ is

A considerable propo hen E and is by far the most recently had a child an t consien tried. A quarter gramme hardly right to judge ave nents or cures sterility. Ether Usually when they few h; and lettuce yields oils that are menstruation they cor la c; wheat germ and Vitamine E

About forty-five cency y white flour. You can further pregnancy might re i e ving all the chemical fat, and whole period. he material up until you get a

You state that or, Vy h a milligramme of that oil will them with a pesemale W Vegetable oils appear to con- we have lactic a dest n th. nal fats. Vitamine E can be week, and then the com es of normal animals, but not the discharge yired better y synthetic diet.

I suggest the distur m durir ity on certain diets can be cured

If they ha res discharge rent?—Yes. lactic acid too; the w after conception do the young letter to t pital if nec

die?—It depends how long the mothers have been on the diet. The effect is that the female cannot bring forth living young.

Has any change been noticed in the foetus?—I have no experience of that. There has been very little done on that so far.

Have you experimented much on this subject?—I have carried out many hundreds of experiments on rats and I have experimented on about 250 mice.

Does the absence of other vitamins bring about sterility?—Yes.

The absence of B will bring sterility as well as Beri-beri?—Yes.

In these particular animals, you keep them in good health indefinitely and yet they are sterile?—Yes.

You can replace Vitamine D by ultra-violet rays and cure rickets, but E cannot be replaced by the ultra-violet rays?—Yes.

Vitamine E can be found in the ordinary dry tea?—Yes.

THE CHAIRMAN: Assuming that this work is confirmed as far as the human being is concerned, you are not yet in a position to suggest any proper dietary which will keep the man or woman in good health and prevent the production of children?—No.

DR. HILL: I have been keeping mice on different diets for years from many points of view of study. One set of mice has been on our canteen tea diet—milk, sugar, tea, bread, butter, cake and biscuits—and those mice have lived healthily for a year or more and then some get symptoms of Beri-beri due to lack of B. I have only secured one surviving young mouse on this diet, as the

mothers fail to breed on it. The tea-shop diet does seem to be one which will produce sterility.

THE CHAIRMAN : The steady reduction in the birth-rate which is taking place might be only partially connected with the use of contraceptives, there might be something else which causes it, such as the tea-table diet?—I think that has to be considered. I understand that in certain trades young women have found out the trick of eating white rice in order to stop their periods.

SIR JAMES MARCHANT : Is the predominant potato diet of parts of Ireland deficient in Vitamine E?—Probably.

DR. HILL : One of the diets which the mice have been kept on is a diet which my son worked out with the Essex labourers, and it is very low in proteins, about fifty or sixty grammes for a man a day. That diet the mice have been fed on and they have bred splendidly. Then there is another set of mice which has been kept on our canteen lunch diet. Some have fasted one, two and even three days a week and they have done well.

DR. BOND : Where is the Vitamine E in the Essex diet?—Well, it is a mixed diet containing some meat, not much, and a lot of vegetables. These people have their own gardens. Green-stuff is a prime source of Vitamines. You have mice on the tea diet and they get symptoms of deficiency of Vitamine E, but just add some raw green-stuff to their food and they get all right. I think the population alters its diet with the concentration of population and want of gardens, and that causes them to breed less. I do not think that we can get the average of ten children like the Canadian French peasant if we tried.

SIR JAMES MARCHANT : You think that the Vitamine E

in Ireland would have more influence than the Catholic religion?—I do not know.

Do you hold out much hope that a certain diet might be an approved contraceptive?—I am doubtful.

THE CHAIRMAN: Do you think it feasible with the knowledge now available to arrange a diet which will diminish or abolish fertility?—I would not like to say that there is any evidence at all as yet that it affects the human beings.

DR. DUNNETT: Have you experimented on any baby foods?—We know a good deal about dried foods, and they contain a little E.

DR. HILL: We have no evidence of E on the human being yet?—No.

Have you any evidence as to the advantage between imported and home meat?—The foreign may be the best, as the animals feed on grass, their natural food.

THE CHAIRMAN: Are we likely to have any further experimental evidence from your laboratory before this inquiry ceases?—We are going on with the experiments.

Do you think that by making a study of certain classes of people with a high or low birth-rate we can know anything about it?—The diet is so varied. It is very difficult to see how this can affect human beings, because the people on the poorest diet are always the most fertile, and I think we must take the view that the diet is not so poor as some believe. The poor get a certain amount of green-stuff and fresh meat.

Has any attempt been made to find out whether your discovery has any application to man?—This question is being investigated.

Do you think that through Dr. Evans we can get any further light bearing on the evidence before this Committee?—Yes.

DR. HILL: We must bear in mind that E is peculiar. In the male its absence produces sterility, whereas in the female the young die *in utero*.

THE CHAIRMAN: Don't you think that the fact that the foetus is not delivered alive indicates that there is some injurious effect in the female?

DR. HILL: Yes. Deficiency of the other vitamins may also have something to do with fertility.

DR. GILES: I wonder whether this work might have any accidental bearing on some works by Arthur Robinson on the question of mares, and the fact that a certain proportion of them drop their foals quite early, the ovum not being capable of carrying on the pregnancy. He thought the explanation might be this nutrition matter?—It is quite possible.

DR. BOND: How far is the damage done limited to the male, to the germ cells of the male? How far is that permanent, or do the germ cells recover?—If the male is kept on the diet sufficiently long it becomes permanent, but if it is only for a short time, then they recover.

Have experiments been made to test the transmission to any subsequent progeny?—Not yet.

Concurrently with this damage to the cells, does it affect the sexual appetite of the male?—No.

How does the vitamin act?—I have had no experience yet.

DR. CHALMERS: The mother is not affected at all, except that she has no young?—That is so. If you give

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this vitamine in excess you cannot increase the fertility. If the normal litter is ten, you cannot increase it to twelve.

How long does it take, feeding your rat on a diet deficient in Vitamine E, to effect all this?—You take a young rat, and as soon as it is weaned you put it on the deficient diet and it becomes sexually mature in about sixty days. If you mate a female then it may become pregnant, but if you take the young rats so produced and put them on the diet, after weaning they will become sterile.

VIII

DR. C. KILLICK MILLARD

THE CHAIRMAN (Mr. Gibbs): Our general method is for the gentleman giving evidence to read the whole of his evidence if it be short, or, if it be too long, for him to pick out the principal points which he wants to discuss or impress upon us.—I am entirely in your hands. You know the time available and I will do whatever you like.

The précis is somewhat short, so you might read it to us and enlarge upon it as you go along?—I should like to point out at the outset that I am afraid that there is very little of real value which I can submit to this Committee. I have, however, been very much interested in this question as a medical man and as a Medical Officer of Health, and especially from the point of view of the working-class mother, who is so often, as I think, overburdened with maternity. That is the aspect which specially appeals to me, but as this is a purely Medical Committee I have left the social and ethical considerations out and confined myself to the medical aspect. A few years ago I tried to find out what was the attitude of the medical profession as regards this question of the use of contracept^{ive} and I issued a questionnaire to just over one hundred medical practitioners who were chiefly in general practice. I took four cities—my own city, Leicester, and others. I communicated with the Medical "complete" do,

Health of the other cities, and told them what I wanted, and they gave me a list of the general practitioners of standing and repute in those towns. And to these and similar practitioners in Leicester I sent the questionnaire, and the replies I received are tabulated in my precis. The first question was :

“ In your opinion is the use of (*a*) the sheath, (*b*) quinine pessaries injurious to health in ordinary circumstances ? ” Fifty-two replied in the negative ; ten replied in the affirmative ; though only one or two said they had any personal knowledge of presumed injury. One thought that the pessaries were injurious but not the sheath. Eleven did not answer the question or were indefinite. The second question perhaps is not a strictly medical question, but it is in a sense ; it was with a view to throwing light on an assertion which had been made in a memorandum by the bishops, that the use of contraceptives frequently leads to estrangement between husband and wife, and I wanted to know whether the medical profession endorsed this : “ Do you consider, speaking generally, that the use of contraceptives leads to estrangement between husband and wife ? ” Forty-eight replied in the negative, though seven qualified their replies by saying, “ If both parties agreed.” Ten replied in the affirmative, though two qualified their statements by saying, “ If no children.” Sixteen did not answer the question or were indefinite. The third question was : “ In cases where further increase of the family is clearly desirable, which method of restriction do you consider to be free from objection on physiological grounds : (*a*) the use of contraceptives, (*b*) complete abstinence from

sexual relations?" I might add that this last question was not asked in the first twenty-five forms sent out; hence the number of replies received was smaller. Thirty-four selected (a) and nine selected (b). Several answers I received were clearly influenced by ethical considerations—one could tell that from the answers. Nevertheless, so far as this questionnaire went, it appeared that a substantial majority of the medical practitioners written to did not regard the use of contraceptives as injurious to health. That is the great point I wish to bring out.

The second questionnaire was issued in 1922, chiefly to consultants, both men and women, in gynæcology. One hundred and sixty copies of the questionnaire were sent out, and sixty-five were returned filled in.

DR. BOND: They were entirely different persons?—Yes, they were selected from the medical directory, from the subjects on which they had written. I sent out one hundred and sixty copies and only sixty-five were returned. The first question was: "Do you approve of married couples using contraceptive methods in cases where, on health or economic grounds, they feel it incumbent on them to limit the size of the family?" Thirty-seven answered "Yes," and thirteen answered "No." Fourteen gave a qualified approval, e.g. "only after one or more children"; "only on medical advice"; "only on medical grounds." Of course a large number did not reply to the questionnaire and therefore I cannot state their views.

SIR JAMES MARCHANT: You do not know their reason?—The forms were not returned, although I sent out a second communication to those who had not replied. The

second question was: "If so, which method or methods do you consider on the whole to be most satisfactory?" That is rather an interesting consideration. The answers received were:—18, "condom"; 5, "condom, or some other method specified"; 8, "quinine pessaries"; 3, "check pessaries"; 1, "check pessary *plus* quinine"; 2, "coitus interruptus"; 2, "douching"; 2, "observing the periods"; 1, "vaginal plug"; 1, "various"; 3, "abstinence"; 2, "abstinence or condom"; 17, "not stated." Now I think it would be a good thing for this Committee to find out which is the most satisfactory method. The question three was as follows: "It has been suggested that the reduced birth-rate which has become so noticeable in most civilised countries, and especially amongst the better-off classes, is not really due, as has been commonly supposed, to voluntary restriction by the use of contraceptives—or only to a slight extent—but is attributable to a reduction in natural fertility. Are you disposed to credit this theory, and can you adduce any facts in support of it?" The answers were: 36, "No"; 18, "Yes" (but no evidence adduced beyond belief that fertility decreased in intellectual classes); 6, "Doubtful," while 5 did not answer this question. Question four was as follows: "Have you had any reason to think, in the course of your professional experience, that the use of chemical substances as contraceptives, *e. g.* quinine pessaries, whilst failing to prevent conception, has injuriously affected the resulting offspring? If you have had any cases where you have suspected this, please give particulars as far as possible." Well, 56 answered "No," 3 "Yes" (two quoted no cases; one

knew of a case of alleged injury, but no proof), while 6 did not answer. This seems to me a question of some importance, and I think it would be very valuable if this Committee could obtain any evidence upon it. I do not contend that there is any basis for the suggestion, but it has been made, and I know that there are some people who have a lurking fear, that if they use chemical substances it might produce some form of monstrosity. That is, that it might affect the germ cells. I have no evidence to support the suggestion, but it is a thing which wants clearing up. Then, in the remainder of my précis, I give particulars of a case where the condom is used all through married life with apparently satisfactory results in every way, and I may say, speaking as a medical man, I cannot see how the use of the condom can be injurious to the male; and as regards the female, it can only be so on the assumption that the seminal fluid is in some way beneficial. But in that case it seems unlikely that the effect would be very different whether the deprivation were due to the use of the condom or to abstinence. On the other hand, I feel strongly that where the husband and wife cohabit and are on affectionate terms, complete abstinence from sexual relations is definitely injurious both physically and psychologically. Further, I believe that in the great majority of normal young couples it is so impracticable that sooner or later it would certainly break down. Personally, I would never recommend it, as a satisfactory method of limiting the size of the family. It runs directly counter to one of the primary and fundamental objects of marriage.

SIR JAMES MARCHANT: By the word "complete" do

you mean complete every day of your life?—Yes, for the sexual life of the woman. Temporary abstinence would be useless, except for the purpose of spacing out of the children.

By complete, then, you mean that they should have no sexual intercourse for the remainder of their lives?—Yes, for the remainder of their sexual lives. I think that aspect has been very well expressed by Lord Dawson recently in an address he gave at Cambridge, and I would refer to his very able presentment of the case. I would like to supplement what I have said. Every week in one or other of our infant clinics we come across striking cases of excessive fecundity, and I refer to that because there are some people who state that such cases are rare. In my experience these sort of cases are quite common. There was a case I came across the other day, where the woman was married in 1913. Her first child was born that year and died; the next child was born in 1914; the third in 1915; the fourth in April 1916; the fifth, November 1917; the sixth, December 1918; the seventh, February 1920; the eighth, June 1921; the ninth, August 1922; the tenth, August 1924; the eleventh, April 1926; and I may add that the woman died two weeks after her last confinement. One of the children was a twin birth, and the twin died. She had altogether eleven confinements (twelve children) in fourteen years, and she died leaving her husband with ten children, the youngest a baby, a fortnight old, and the eldest, twelve years old. That seems to me to be a very distressing case.

DR. SPENCER: What condition was she in? was she

healthy?—Yes, I believe so, apart from the complication of childbirth. I suggest that there were far too frequent pregnancies for the woman to do justice to herself or to her children, and it would have been better if the children had been spaced out for a much longer period than thirteen years.

DR. FAIRFIELD: In that case, did you know what in fact was the condition of the children? have you any evidence as to what the children were like?—I am sorry I have not those particulars. I have just the names and the dates of the birth of each one. My point is that that was an example of too frequent pregnancy, and that there were more children than the woman could properly look after. Then I have the case of my gardener, who had eighteen children in the space of twenty-five years, all one at a birth. The man has told me what a hard struggle he had in his early years until his children were earning money. At one time he had twelve children, none of whom was earning anything; his wages were 25s. a week. All the eighteen are alive. I want to suggest with all respect that scientific investigation into the best means of controlling conception is greatly needed, and I most heartily welcome a serious attempt, such as this Committee are making, to obtain evidence on the scientific aspects of contraception. What is required in the ideal method of preventing conception is that it should be reliable, harmless and simple.

SIR JAMES MARCHANT: Fool-proof, in short?—If possible, but I do not know that you can get a fool-proof method. Methods are required which can be used by the male or the female. As regards the male, we already

have the condom, which largely satisfies all these tests, and I submit that it is reliable, harmless and simple. It is true that it has its drawbacks, that some men object to its use on the ground that it interferes with the gratification of the act. This objection may be set off against the objection which some allege, that the use of contraceptives encourages excessive indulgence. I would suggest that the use of the sheath tends rather to discourage excessive gratification.

THE CHAIRMAN : Have you any information as to injury to the man or the woman by the use of contraceptives? You speak about the injury to the possible offspring. Have you any evidence of injury to the possible parents?—The only evidence I have was what I obtained from the questionnaires. It was suggested that quinine pessaries sometimes caused local irritation, and of course some of the medical men gave a general condemnation of the use of them on the ground that any interference with nature was bound to be injurious. I cannot regard that as evidence, but that was the kind of opinion expressed by medical men opposed to the use of contraceptives. I myself have had no case brought to my notice of injury from the use of contraceptives. I admit I am not a gynæcologist, and therefore I am not very likely to have cases brought to my notice.

Would you suggest that the poor can use the best of contraceptives, such as the condom?—When you say the poor, that is merely a question of the cost of these appliances. If you say the very careless and thriftless, I admit that there is a difficulty, because all methods involve a considerable measure of forethought and care and

prudence. The condom costs, I believe, something like four shillings a dozen.

No, ninepence or one shilling each.—Of course, values have changed. That of course is a consideration, I admit, but I do not think that the question of cost can be said to be a serious barrier, but it is a difficulty, and they require, as I have said, a certain amount of care and forethought. We should have some alternative reliable and simple method for the woman, where the husband will not take the necessary trouble to use the condom. Incidentally I might mention that when addressing a meeting of retail chemists I was informed that it was generally the wife who came to purchase the appliances, whether it was the condom or quinine pessaries.

Have you any experience of the modern methods of contraceptives?—No, I have not. I might add that I have occasionally been consulted by men who have been referred to me through our clinics, or who came to me because they knew I had expressed certain views on the question, and they have asked me about methods. Unfortunately, they do not come back again, and I do not know what result has happened from the advice I have given. That is where the birth control clinic should be of considerable value by getting real evidence.

MR. BOND: What is your feeling in regard to the effect of the use of contraceptives over a period, on the subsequent fertility of the wife who uses these methods?—I am not, of course, really in a position to answer that question. It is a question for the gynaecologists. Personally I do not feel there is any evidence to justify that fear.

In the case you mentioned the evidence was in the other direction?—People who use contraceptives early in their married life may want to have children afterwards, and if they cannot have them they are sometimes inclined to reproach themselves and to think that it has been a sort of punishment for the steps they took early in life. As scientists we know how easy it is to deceive oneself in that sort of way. The probability is that they would not have been fertile in any case.

In regard to these various striking families you mentioned, were they chargeable to the public funds?—The man who had eighteen children works in my garden in his spare time. He is quite an exceptional man and has a most capable wife. They could not have brought up eighteen children otherwise. As far as I know they have never been chargeable to the parish.

SIR JAMES MARCHANT: They have not injured the race?—They have not. They are all healthy children. I do not think that many couples could have accomplished what they have done. As regards the other case I have no particulars, and I will not attempt to say.

DR. FAIRFIELD: You spoke of spacing; what would you hold out as the ideal for the time between children?—About two years; I regard that as the ideal.

Have you any scientific reason?—I have no scientific basis, but have merely observed human beings, and that is the opinion I have come to. Only one year between is too soon. It does not give the woman time to pull herself together and get the other child off her hands. In two years it will have become a “toddler.”

Of course everybody does not agree, sometimes they

advise four years. I know a great many nurses who advocate four years.—I think that is too long.

Would you recommend that every normal married couple should use contraceptives after the birth of the first child?—No, I would not go so far as that. If they felt that the children were coming too fast they would, or if they were afraid of them coming too fast, and I would not object. The particular couple I referred to at the end of my evidence began using contraceptives after the second child had been born, as they were not going to take any risks, and when four children had come, properly spaced, they decided to have no more.

Take the case of the fertile families; can you measure fertility and say that Nature has made a mistake. Even where you have eighteen children, is it not possible that Nature knew more about that stock than we did?—Of course you can suggest that, but I am suggesting that we as intelligent human beings have to decide independently of Nature, and most people would say that eighteen children would be more than they felt equal to.

It is an economic problem?—Not entirely, it is physiological as well. Most people would say that it would be too big a strain to have eighteen children in twenty-five years.

But was it?—I cannot say. In that particular case the woman apparently did not permanently injure her health. I would not care to take the risk myself, and I do not think that many women would. Take the other poor woman I quoted; you might say that up to the eleventh child everything had gone all right.

Did she die from exhaustion or by one of the accidents

of childbirth which might have happened with the first child?—It might have been so.

They all survived?—There were ten out of twelve.

SIR ARTHUR NEWSHOLME: Quite apart from any question of contraceptives, have you any evidence of what is the normal family or the average family—is it five, six or more?—You are a greater statistician than I am and you can answer that question better than I can.

Have you any impression as to what it should be?—I think that question can only be answered by statistics.

The average is undoubtedly less than the eighteen?—Yes.

Would you say that it was lower than five, or would you say that the average should be more than five?—I am not at all qualified to answer that. I have the idea that it would have been five or six in the old days, but that the average to-day is about three.

I accept that answer, it fits in with my own impression. The average being five, would you tell us what is required to keep up the numbers of our race? I mean, that five children are born alive and some of them might die in infancy or at childbirth. What is the number we ought to have?—Of course, before you can answer that question you would want to know what your infant mortality is. But I should think that three would do it. Then there is the question of the childless marriages. I cannot answer how many of the childless marriages are voluntary; I think very few; but of those that are involuntary, you have to consider how many are due to venereal disease; but if we had a normal state of society where most men got married and most women had children, a very small

family comparatively speaking would be sufficient to maintain the race.

The average family is five children ; to keep the population from being a reduced population three and a half children are required ?—I do not think as much as three and a half.

We will say three ?—I do not think that you can reasonably call on any individual to have a large family in order to make up for those who have none.

You would prefer a decreasing population ?—Or get other people to marry and have children.

You think that the four years' interval is too long ?—I think so, and I am prepared to justify that.

You particularly press that view on psychological grounds, such as the training of the children ?—That is so, and there is little advantage for the parent in having them spread out too much. There is no object in making it four years. Two to two and a half years is quite long enough.

So your advocacy of birth control would be limited in securing the spacing of the children for two years ?—Until you have the required number of children, whatever the number the parents have decided on.

Would you say four or three ?—Three or four, you cannot dictate.

I take it that your definite opinion of birth control is not to be recommended in families unless there is a family of three or four ?—For purposes of spacing it might begin directly after the first child.

And the spacing is to secure an interval of two years ?—Yes.

I notice you seem to try and distinguish between prevention of conception after the birth of the first child, and prevention to prevent the birth of the first child?—Personally I think it is bad to begin birth control before the birth of the first child unless there are special circumstances, such as housing shortage. Under normal circumstances I would not recommend birth control unless they have made sure of one child.

You draw no ethical distinction between the two?—I am not discussing the ethical side.

DR. AGNES DUNNETT: Do you think that a birth control clinic would also have disadvantages?—I suggest that a birth control clinic should not necessarily be a prevention of conception clinic. Very often a wise medical officer will give advice which will tend to encourage a young mother having children, for it is possible to restrict too much. All that can be done in a birth control clinic. Personally I feel that there should be little need for special birth control clinics, for I think that this information should be given, as a matter of course, at existing ante-natal clinics, and by giving it properly there through the medical officers it would prevent this subject getting into the hands of unqualified people. The question is: Shall we regulate it or leave it alone? Unless the present embargo of the Ministry of Health is removed, it is inevitable that the subject of birth control will get more and more into the hands of unqualified people. Would it not be better to regulate it, control it and direct it into proper channels? I would never attempt to dictate to medical officers as to what advice they should give; you have to trust to the discretion of the individual medical officer.

SIR ARTHUR NEWSHOLME: If you were the medical officer of health and you had a young lady doctor at the head of the ante-natal clinic under your jurisdiction, and that young lady doctor held extreme views and was ready to give advice to the mothers, would you agree to that?—I should point out that this matter was a controversial question and that it would be very easy to be indiscreet about it.

Suppose she had conscientious views about it?—I should point out that the ante-natal clinic was not a clinic for the dissemination of contraceptive information *ad hoc*. But when it comes to the individual patient and doctor I think it is a matter entirely for the doctor and the patient to decide, and it is up to the medical teaching schools to see that all medical officers should have proper instructions on the question.

DR. FAIRFIELD: If you read the discussions in Hansard and Birth Control Journals, I think you will see that it is said that the doctors should give instruction to the people who desire it. I have asked the working men: Will you be satisfied to have it left to the doctor's discretion? They have laughed at the idea that a lady or a gentleman doctor should decide what number of children they should have.—I think you must leave it to the discretion of the doctors. You cannot dictate to the doctors as to what they should say to their patients. I say there should not be any attempt to muzzle the doctors.

Is there not a distinction between the doctor in public practice and the doctor in private practice who has the personal relationship? Is not the public doctor bound to accept the ideas put forward by the authorities?—

If the authorities say to a Medical Officer "if you give birth control information, you must leave," I think that would be wrong. I think that is an unfair position, and I want to see that remedied, but I do not go so far as to say that any woman who demands information from the doctor should get it. I do not agree with that.

DR. SPENCER: You have spoken about reliable contraceptives and have mentioned the condom, for instance. Every gynæcologist has had instances where that has failed?—If birth control were recognised it would be possible to take precautions to see that only reliable contraceptives were sold.

In regard to quinine pessaries, I think that there is very little doubt that they do injury to the woman in the way of producing infertility. I have seen cases where they use the pessaries after the first child, and they have afterwards wished to have children and could not have them. I have found that they cause an irritation.—Well, there is room undoubtedly for scientific work on the question, and I have always felt that quinine pessaries can probably be improved upon.

Do you agree with Lord Dawson's view that young people of the present day have settled this question for themselves and are going to use contraceptives? The thing is settled by the young people themselves, and whatever we say they are going to use the contraceptives and will go on using them. Do you consider that that is the case?—Undoubtedly; I feel it very strongly. I have no doubt whatever that birth control has come to stay, and it is up to the medical profession to act in the matter rather than leave it alone and allow it to drift. At

present the profession are working largely in the dark, but we should be in a position to tell the people what to use and what not to use.

PROFESSOR HILL: We can also guide them on the extreme merits of having children and the benefit to health and happiness?—Exactly.

SIR JAMES MARCHANT: Do you think that this age requires birth control more than any other age?—I am afraid that that question is rather difficult to answer. Possibly the conditions now are rather more complicated and difficult, and it may be more expensive to bring children up according to the standard which we have come to look upon as being desirable. But I am not saying that it was not desirable that they should have practised birth control earlier than they did.

Do you consider that in 1926 you will produce better children by birth control?—It is more necessary perhaps. We are getting a bigger population on the earth than in the Victorian age. We have not yet got to the point of a stationary population. I think we have got past the stage of natural selection, and we have got to substitute something for it.

PROFESSOR HILL: Do you pay more attention to stock or to environment?—I would rather not answer that question.

Does not environment begin when the ovum begins to divide?—Yes, I suppose it does. That is where antenatal work is supposed to do something.

SIR JAMES MARCHANT: Is birth control in this age merely to be regarded as a necessary evil and therefore we have got to control it and make the best of it?—

Need you use the word "evil"? I do not know that it is necessarily an evil.

But I mean that here it is, and it is for good or for ill. We got on pretty well up to 1876 without it. Since 1876, I am not so sure that we have improved.—May I suggest to you that it is a phenomenon which has come to stay, and it is for us to make the best of it?

Supposing we had the environment we ought to have in this age, of good housing, better education of people; supposing you had adequate environment in the fullest sense, would it be necessary to have birth control?—That is very easy to answer, because the people who use birth control are just the ones who have all those advantages you have enumerated. They have been practising birth control for the last half-century.

Without justification, you think?—No, I think that they are fully justified.

PROFESSOR HILL: Is birth control necessary for the tenement dwellers to get better conditions?—It will help them, because they suffer from bad environment, and the big families make the environment worse.

We know that birth control has been used by the upper classes. Do you think that there is a great loss in stock through the upper classes using it compared with the industrial workers, or do you think that there are just as good fellows among the industrial classes?—Birth control is not limited to particular classes. It tends to spread downwards, and it is least practised amongst the less desirable portion of the community, the most careless, the most thriftless. At present it is admittedly dysgenic.

DR. FAIRFIELD: You say that you prefer the condom.

Do you suggest that the condom should be sold or given away at Infant Welfare Centres?—I do not think that I would give them away or sell them, but I think it might be desirable that there should be an opportunity whereby women can be taught to use the alternative methods. At present one knows that the sale of these things is surrounded by objectionable features. At present it would be hardly delicate to introduce them, but public opinion is moving so fast on this question that one cannot foresee the position in say, five years' time. These things are not unclean in themselves, it is only according to what we think that makes them so.

IX

BINNIE DUNLOP, M.B., Ch.B., Honorary Medical
Secretary of the Malthusian League.

DR. DUNLOP: I should like to deal in the first place with our diagrams of the Registrar-General's vital statistics, showing the variation of the birth and death rates of the various countries. They give evidence that the falling birth-rate has been a very important factor in the falling death-rate. You will see under these first countries, England, Wales, Germany, France, Holland, Sweden, Hungary, Italy and Europe generally, that they have had a falling birth-rate from 1876 or so, and they have had a falling death-rate. Then you have countries with both rates stationary and both rates rising. So I submit in the first place that the falling birth-rate has been an important factor in the fall of the death-rate, and therefore one's attitude towards the question should be a sympathetic one; one's attitude towards contraception should be a sympathetic one, inasmuch as one feels on the balance, to the community as a whole, it has been evidently beneficial. If the birth-rate had not fallen, the death-rate would not have fallen like that, because it would have meant an ever-increasing survival rate, a natural increase of population of a rate such as no old country has had. You find on examining the survival rates in the various countries that you never

have a steady survival rate of over 20 per thousand. The decline of the birth-rate has been almost entirely due to chemical and mechanical contraceptives and coitus interruptus. Only when countries have had a declining birth-rate have they had a declining death-rate. Therefore these methods have been a large and essential factor in the reduction of death-rates. For example, if England's birth-rate had remained at 35 per thousand a year, it is most probable that the death-rate would not have fallen below the high figure of 20, because on Malthusian grounds a rate of natural increase of population of over 15 per thousand a year is not to be expected in a long-settled country.

SIR ARTHUR NEWSHOLME: That general proposition is a very important one. I do not know whether you wish us to make notes or pursue that now and get rid of it?

THE CHAIRMAN: I think we should take it point by point.

SIR ARTHUR NEWSHOLME: That simplifies the discussion, and I think we might spend a little time profitably. Dr. Dunlop makes the reduction of the death-rate, depend on the birth-rate. I submit it does not depend on the birth-rate to anything like the extent Dr. Dunlop suggests, and I should like to ask Dr. Dunlop one or two questions on that. I ask you to look at the diagram for Ireland, which is a crucial instance. The position there is owing to the extensive migration in Ireland. Ireland consists of many people not of the child-bearing age, who therefore cannot add to the increase of the population; and secondly, owing to the fact that the population of Ireland is old as compared with England, it

would have a higher death-rate?—Yes, I agree, but my point is that death-rates have kept practically parallel with birth-rates, and since 1886 Ireland had a stationary birth-rate and a fairly stationary death-rate. There was a time from 1871 when the birth-rate was declining and the death-rate was rising, but I suppose that was a time of great poverty and of very heavy migration of the young and the fit.

Would you take it that Ireland is an exceptional case; it does not fit in with your general proposition?—No; my proposition is that usually you find a falling birth-rate accompanied by a falling death-rate; but in the case of Ireland you obviously have another factor coming in. However, after 1886 you have the parallelism of a stationary birth-rate and a stationary death-rate.

Will you pass on to France? France is the country which has pushed the reduction of the birth-rate to the greatest extent?—Yes.

Will you agree that France is a country which has had a relatively small decrease of the death-rate, a much smaller decrease than in England in which the decline of the birth-rate is on a much smaller scale?—In France the death-rate fell from 28 per thousand, a very high death-rate, down to about 19 or 20 per thousand.

And in England the death-rate is down to about 12?—Yes; countries vary in the death-rate according to the birth-rate and economic factors.

There are other factors?—Yes; but you notice I say “almost entirely.” I do not say that parallelism of birth-rate and death-rate is an absolute thing. If a country has a sudden spell of prosperity—for instance,

discovers oil fields and is prosperous—what happens is a fall of the death-rate. There you have a sudden increase of the capacity to support the population. We had it in England with the cheap food coming from America. It was not the birth-rate which went up which caused the increase of population, it was the death-rate coming down owing to the increased food supply.

SIR ARTHUR NEWSHOLME: I wanted to make it clear that the general proposition put forward is subject to a large number of deductions owing to other factors occurring at the same time, and I cannot agree with the sweeping statements made.—Which one?—"Only when countries have had a declining birth-rate have they had a declining death-rate."—What country has had a declining death-rate that has not had a declining birth-rate?

Look at France; the birth-rate has gone down very low, and within a few points the birth-rate has become stationary and the death-rate is declining?—Up to these figures, but the diagram does not include the latest figures. Here you have a falling birth-rate and a falling death-rate.

In the last five columns the birth-rate is stationary and the death-rate is declining more?—There was a slacking-off in the survival rate. But it is about the same; there is not much difference. There is not much there in the way of fall. I am sure you would be hard put to it to find any country with a declining death-rate which has not a declining birth-rate. For example, if England's birth-rate had remained at 35 per thousand a year it is most probable that the death-rate would not have fallen below the high figure of 20, because on Malthusian

grounds a rate of natural increase of population of over 15 per thousand a year is not to be expected in a long-settled country.

You assume a fixed law, the Malthusian law, and notwithstanding contraceptives the difference would be a difference between the death-rate of 20 and the birth-rate of 35?—I say supposing the birth-rate had remained at 35, you are assuming that the death-rate would have fallen all the same. I deny that the death-rate would have fallen. I say that you are assuming a far more rapid rate of increase than we find in old countries.

Does it mean that people then would not trouble to use contraceptives or that they were inefficient?—I am supposing the birth-rate had remained at 35; that is a high birth-rate. I maintain the death-rate would not have fallen below 20. People who deny that proposition are assuming that there is no limit to the rate at which you can increase your food supply, whereas all round one sees there is a difficulty in increasing it rapidly.

But there are plenty of other factors concerned than the relation of the birth-rate with the death-rate?—Yes, there is the example of Europe benefiting by the discovery of America and its cheap food, and the cheap transport of food. But these things do not happen often in the history of the world; and we are generally up against a very slow increase of food supplies, so that the birth-rate comes to be the dominant factor.

To resume my précis. Thus, if these methods be injurious to the users of them, they are much less injurious to the community as a whole than is a high birth-rate. But are they injurious to the users of them? That they

are not is still more strongly suggested by the reduction of the death-rate among our middle-aged and elderly people, of whom a considerable proportion must have used them for many years. Table A on page 38 of the *Report by the Government Actuary on the Financial Provisions of the Widows', Orphans', and Old Age Contributory Pensions Bill* (Cmd. 2406) gives the rates of mortality for men and women, at ages from 16 onwards, in 1920-21 compared with 1910-12. Now I have got these in diagrams which illustrate this. The reduction in the death-rate of men and women respectively, was 4% and 4% at the age of 30, 11% and 14% at 35, 16% and 19% at 40, 20% and 21% at 45 and 50, 18% and 21% at 55, 16% and 19% at 60, 12% and 15% at 65, 8% and 13% at 70. It is remarkable, too, that there was little or no reduction until after the age of 25, which is about the average age of marriage, that the reductions for the sexes are nearly equal, and that it is those for women which are the larger. I consider that the economic factor is the main thing, but it is striking that you do have this improvement coming on in the reproductive period. How I found these figures was that I wanted to find out what figures were available regarding the later years of life, so that you take these people who might be said to be influenced by this practice of contraception and see what was happening in their death-rate. I might also give you the longevities. Here you have the increase in the expectation of life, a diagram of the figures of the London life tables given by Sir George Newman in July 1925. They show that the expectation has been rising since 1850, but more rapidly since 1880.

THE SECRETARY : Due to the use of contraceptives, is that the argument?—My belief is that it is due to the use of contraceptives reducing the birth-rate and thereby reducing the pressure on the means of subsistence.

You argue that the use of contraceptives is the cause of the decrease of the birth-rate?—Yes, and that in spite of the use of contraceptives the death-rate has fallen.

SIR ARTHUR NEWSHOLME : The point is, to the better economic conditions resulting from contraceptives?—That is so. I believe it is entirely economic, and I cannot put my finger on any evidence that indicates that contraceptives are injurious.

THE SECRETARY : You think that if they were injurious they would show in the death-rate table, that people would die through using them?—I expect to find that the women probably would not have shown a greater improvement than the men, because, presumably, if injurious, contraception would be injurious to the woman, whereas you find it is the health of the woman which has improved most.

SIR ARTHUR NEWSHOLME : Would it not be your opinion that it is unreasonable to think that such a minor factor in life as contraceptives can possibly influence the death-rate of the persons using them?—Besides the economic advantage, there is the general cheerfulness and well-being that is reflected in the general health, and doctors are very much impressed as to the remarkable improvement in the cheerfulness of the outlook of women when they seem to be relieved of this dread of having more children than they can do justice to.

THE SECRETARY : These statistics are not inconsistent

with your argument?—They illustrate it. My point is that there is an improvement in the health such as would reduce the death-rate. Whenever a doctor is going to test the effect of anything, it is the death-rate he considers. These two diagrams, I submit, show that the improvement of health is remarkable. I ask you to see if you can find any long-settled country with a falling death-rate which has not a falling birth-rate, and if you find one I must admit I am bowled out. There is considerable evidence as to coitus interruptus being injurious, yet there is also medical testimony to the contrary. In the medical journals you find this occasionally quoted from the foreign literature, and it is considered that the evil effects of coitus interruptus are greatly exaggerated. Some medical men have told me privately that in their opinion there was nothing in it.

THE CHAIRMAN : The injury or the exaggeration?—The injury. They do not consider that there is any injury. They were, of course, considering it from the men's point of view.

And what about the evidence as to the much more important chemical and mechanical methods?—The few doctors who have declared these to be injurious have been opposed to their use on religious, national or eugenic grounds. If they were injurious, many experienced practitioners would have been remarking that some bodily or mental disturbance or disturbances, which one could associate with their use, had been becoming increasingly common. But this has not happened. On the other hand, even our gynæcologists have been stating or implying that these methods are not

injurious. At your Birth-rate Inquiry in 1914, Sir Francis Champneys said (p. 139) that he did not think it was true to say that in the majority of cases prevention affected health directly in a deleterious manner. Dr. Mary Scharlieb, when asked if injury resulted from the use of contraceptives, replied (p. 271), although she is profoundly opposed to them on religious and national grounds: "No physical injury. In the majority of cases they cannot do physical harm to anyone. From the use by the wife of a douche or a quinine pessary, or from the use by the husband of a sheath, I do not see that any physical injury results, but I am sure there are recondite effects upon the nervous system." She also said that "directly a couple are living together in intimacy of marriage, abstinence appears to have a very deleterious effect." The *British Medical Journal* of March 18, 1922, reported several references to the subject by others of our leading gynecologists at one of their meetings. Dr. R. A. Gibbons, who, on national and eugenic grounds, rather deprecates family limitation and is a keen advocate of sterilisation of the unfit, said that contraceptives could not be approved from a physiological point of view. Dr. Amand Routh, who has strong religious views on the subject, stated that voluntary limitation of conception led to much harm in both parents; but he also remarked that it was unnecessary because the need for immigration into our Dependencies was almost illimitable, and that if limitation was necessary the doctor should decide upon the methods. Dr. T. W. Eden said that he saw no advantage in producing more babies than could be provided for by the parents. Dr. Laphorn Smith sub-

mitted that an increase of population would aggravate the overcrowding and bad housing conditions. Dr. Arthur Giles declared that if only those who could not afford to bring up children controlled their families little could be said against it. Thus do leading gynæcologists, although they do not favour the birth control movement, imply that there is no medical case against contraceptives. Another significant consideration is that reviews in the medical journals of books on birth control imply the same.

But possibly contraception has been and still is slightly injurious in a way which is rarely mentioned. It has occasionally been suggested that there are more "nervy" people among the married who practise it than among those who do not. This might well be so; not, however, because contraception is injurious, but because it is uncertain. Because it is uncertain, many couples live in almost constant anxiety that they have had a failure. If people could be assured that no unwanted child need be born, this anxiety would disappear. Finally, it should be realised that most married people are now determined to limit their families, and, consequently, that to discourage the use of contraceptives is to keep up the serious amount of abortion which prevails. If there were no contraceptives, there would be great poverty and a very high death-rate.

DR. SPENCER: Is there any contraceptive measure in which you are sure?—No.

If you are honest, would you not tell the people it is not reliable, and therefore the people would have a certain amount of worry and anxiety?—There is not yet any absolutely reliable method.

SIR ARTHUR NEWSHOLME : Can you pursue that point as to how sure you can be?—It has been said in Holland that about 2 per cent. of the couples advised in the Mensinga method had failed in the course of their lifetime, which is a very small percentage indeed. There are men in poor circumstances who have told me that they could not bear the thought of even one in a million chance of failure.

THE SECRETARY : Would you say that this was merely a method of chemistry, and it is a matter which can be improved?—Yes, and that is what I hope. A doctor told me recently that ureate of quinine suppositories were so far proving a hundred per cent. certain, and this does suggest that something simple and certain will be found.

In that case your argument of fear would pass away?—Yes, and there would be further great improvements in the health of the people.

SIR ARTHUR NEWSHOLME : Have you any evidence that abortion was more frequent before contraception came in?—No, I have not. I think before contraception came in there was just the idea of letting things go.

DR. GILES : Broadly on economic grounds I am opposed to contraceptive measures, but on medical grounds I recognise well-defined conditions where it is all important that birth control should be done. I allow there is the case for the people who already have a number of children and feel that they really ought not to have any more, but my fear frankly is that that teaching may be abused, as all people would start their married lives with the intention of limiting children right away, and that appears to me on many grounds to be a great pity. Many couples do

it, as their idea is to have a good time before they have the responsibility of parenthood. I agree on medical grounds and certain economic grounds.

THE SECRETARY: Would you have parenthood controlled by the State?—To the extent that people should not be given assistance when they continue to be imprudent. I always say that if you disregard this point and let the people be imprudent, then you will have a lot of starving children. There is then only one thing to do, and that is to feed them, which is the beginning of Socialism.

You would not take the surplus children and send them to sleep?—No, but to insist upon parental responsibility is the way to improve the conditions and the quality of your population.

SIR ARTHUR NEWSHOLME: Insist upon; does that mean compulsion in some form or other?—There will have to be some penalisation of those who disregard this principle. We want to discourage large families among the poor, and I cannot understand how it is, especially when our national position has become so precarious, that we do not think about it.

May I suggest that the time has arrived for the closing of the Malthusian League because your mission is fulfilled? Assuming things go on as now, and they go on in the same way twenty years hence, the population will be stationary?—Yes, if it were not that our statesmen and economists say that competition is becoming more severe and it is questionable if we can employ the population we have already got. If it were not for that one would be satisfied that things would be remedying. Then, again,

it is wrong to have the highest birth-rate in the poorest class.

DR. GILES: You could have a high birth-rate in a country provided there was work for the people?—Yes, but you never have remunerative work for all. The nearest approach has been in new countries like America, where they have been able to double the population every twenty years.

DR. IVENS: I was wondering how you would encourage the unfit not to have children or to have only a few, and on the other hand, how would you encourage the well-off and fit members of society to have more children?—First of all make the knowledge easily accessible at the welfare centres. They should be able to get the information there. If they have not the intelligence to understand, then segregate them or give them an opportunity of being sterilised.

It would mean that you would have to introduce methods such as segregation and sterilisation?—Yes, and I believe that sterilisation will become the most popular method of birth control.

Is that the policy of the Malthusian League or is it your own opinion?—The Malthusian League says that the people should not have more children than they can provide for.

SIR ARTHUR NEWSHOLME: They do not suggest the practical policy of carrying that out?—They think that information should be given in these matters, and do. The other point you refer to about encouraging the richer people to have children or larger families. We put great weight upon the economic factor, and we believe that if

there were a lower birth-rate among the poorer people there would be a higher birth-rate among the better-off classes. They would not be so heavily taxed. Also if babies were not so plentiful, there would be a pride in having children.

You would still allow that the reckless will continue to be reckless and will not use these methods?—Not so much as now. If it comes to be a recognised public policy that they should exercise prudence, there will not be nearly the amount of recklessness there is now.

DR. DUNNETT: If married couples only have two children each with an infant mortality rate of 50 to 60 per cent. and a general mortality rate of 12 to 14 per thousand, how many years would it be before we got into serious trouble from a diminished population?—People will have an average family of 2·5 at least, and that will maintain the population.

THE SECRETARY: Do you think it better that we should have a few well-brought-up folk?—Yes, as long as we are not in an unsafe position nationally.

Would you argue from your point of view, or from the point of view of a good citizen, that there must be control in this most important factor of human life?—Yes.

Now would you go on to argue that supposing we have not that self-control, we ought to adopt your methods of control mechanically or chemically, as a necessary evil? Would you prefer self-control to mechanical or chemical?—No, I say that whatever makes for the greatest well-being is the right thing, and consequently I have no objection to people using mechanical or chemical contraceptives if they find that that suits them.

Do you think the use of these chemical or mechanical means will cultivate self-control?—They do involve thought and care.

There is the objection of Dr. Alfred Russell Wallace, who told us that first you must clean up your social conditions, and when you have done that to the extent of everyone having a sound environment you could then ask: Is it now necessary to interfere with the coming of children into the world? Would you be prepared to await that cleaning up of the social conditions?—No, I say you will not get the social conditions clean. Birth control has to be the first step.

X

NORMAN HAIRE, CH.M., M.B.¹

THE CHAIRMAN (Sir Arthur Newsholme): We will take your paper paragraph by paragraph.

DR. HAIRE: I think I can go through the first two pages: "This paper is based on more than 4000 cases seen in the last six years. Many of the patients have been under regular observation from time to time during the whole of the period, some during shorter periods; some I have seen on several occasions, some only once or twice. In all cases I have gone carefully into the patient's previous history, especially the gynæcological and marital history. Where possible I have interviewed the husband as well as the wife. I inquired if any contraceptive had been used before, and if so, what kind, over what length of time, and with what care and regularity. Where contraceptives are to be used it is desirable that a medical man or woman should advise the best method for the particular case. No nurse or other non-medical person is competent to make the necessary examination, and form a decision as to what method is best for a given patient, and then properly instruct the patient in the use

¹ Dr. Haire asks us to state that limitations of space have made it impossible to print his paper in full.

of that method. It is desirable that the patient should return to the doctor at intervals for supervision, and this is particularly desirable from the point of view of research. The doctor should endeavour to note the effect of the contraceptive on the physical and mental health of the patient, and so obtain much-needed data. I want to point out here the extreme difficulty of obtaining exact data on contraceptives; the patients are frequently unintelligent, and more often unobservant, and are quite unable to give definite answers to some of the questions. They may have used a particular method irregularly, or two or more methods in different combinations at different times. Whatever method they have used, they may have used it carelessly, and often they do not tell the truth. On this chart I show the percentage of failures I have found with the different methods. And I present the chart to you with certain qualifying remarks. Now, as a considerable percentage of these people came to me for the purpose of obtaining contraceptive information, it will be obvious that among them there were many who had tried contraceptives before and found them unsatisfactory. It follows that among these patients there will be found a greater number of cases in which any given contraceptive has failed, than in an equal number of patients chosen at random from among the contraceptive-using public. And the period over which the method or methods were used varies from a single occasion to as much as twenty years. While the following numbers cannot be regarded as sufficiently exact for statistical purposes, I believe them to be useful as indicating the comparative

value of various contraceptives, as shown by a study of a large number of cases.

Method.	Failure.
Safe period	100%
Coitus interruptus	69.5%
Holding back	100%
Quinine suppositories	70.8%
Douche	73.5%
Condom	51.14%
Cervical pessaries	87.5%

THE CHAIRMAN : Can you tell us the number of cases in each group at this point, or will it come in later?—These groups were taken on about 1800 or 1900 cases.

The whole lot?—Yes.

Under 2000 for all the different cases?—Yes, about 1800.

Have you any classification in each group according to age?—No, I have not made that. I will go on: "In this paper I do not discuss the *indications* for contraception, but only the technique. Let us suppose that a doctor has a patient whom he has advised that she must avoid pregnancy. What methods of avoidance are available? And with regard to each method, is it harmless, is it reliable, is it easy?" Then I go on to discuss the means of preventing the sperm coming into contact with the ovum, and here is a passage about sexual abstinence which I think I should read in full: "Obviously a very sure way to do this is to abstain from sexual intercourse altogether, and this method of contraception is warmly advocated by many people. Regarding sexual abstinence in its purely medical aspect, I believe that

there are a minority of persons who are able to abstain from sexual intercourse for long periods without any apparent harm resulting. Such people I regard as being abnormal, their sexual appetite being but feebly developed. In the majority of adults of both sexes in whom the sexual appetite is developed to what may be described as a normal intensity, I believe that long-continued abstention from sexual intercourse produces more or less severe psychological and even physical disorders. This may even apply to persons who have had no previous experience of sexual intercourse. In the case of married persons already habituated to coitus, and living in intimate relationship with their partners, and so subjected to more or less continual sexual stimulation, prolonged sexual abstinence is usually, I think, definitely harmful." That is all I say about sexual abstinence. Would you like to ask me any questions on that point?

MR. BOND: I would like to ask in regard to physical disorders if Dr. Haire can give us any examples?—I think that a lot of people who practise abstinence from normal sexual intercourse indulge in some deviation such as masturbation, while many married people indulge in other practices. Where people abstain from sexual intercourse I find that they suffer from all sorts of functional disorders; I have known cases where a husband or wife, or both, suffered from indigestion or sleeplessness. In one case they came to me and I fitted the wife with a pessary, and both of them have much improved without any attempt to treat the indigestion.

DR. SPENCER: Do you find that nuns and priests are usually unhealthy?—May I answer that in a roundabout

way to make it quite clear? I think in dealing with the subject of self-control you have to consider two factors: You have to consider first of all the strength of the sexual urge, and secondly the strength of power of self-control.

SIR ARTHUR NEWSHOLME: We will go on with the next paragraph, the *safe period*. Many of the members are familiar with that point and you might leave that out, although I should like to ask one or two questions. One safe period is the eighth day before the next menstrual period, and then the fifteenth day after and the fourth day before the beginning of the next. There are three safe periods enumerated in your paper. Have you any view which of these three is the best?—I say that these different safe periods cannot all simultaneously be correct and I have with me Siegel's book.¹ He had previously published certain conclusions about the safe period on the ground of examinations of women during the war period. Siegel categorically withdrew some of his statements later on. He says: "I can no longer maintain my former decision of saying that impregnation is impossible after the 22nd day," and he also qualifies his original opinion by pointing out that these days were determined for women with a 28-day periodicity, and that in women with a 21-day periodicity, a 25-day periodicity, a 30- or 35-day periodicity, it would not be valid.

Are there such variations in normal women in the cycle?—I think so.

We have it on record then that Siegel withdrew or

¹ *Gewollte und Ungewollte Schwankungen der Weiblichen Fruchtbarkeit*, (Berlin, 1917).

partially withdrew?—He *definitely* withdrew that statement. It is only one sentence, and I will read it out. This was published in 1917, so it has long been available to English readers. The name of the publication is, "*Voluntary and Involuntary Variations in Feminine Fecundity*," published in April 1917, p. 48: "After the 22nd day"—that is, the 22nd day after the beginning of the period—"from the beginning of the last period until the beginning of the next menstruation, the capacity for impregnation of the woman is at a minimum. I must confess it is not nil, as I previously thought. It is only three or four per cent. of the ordinary possibility."

Can we now go on?—I heard the last witness, and I should like to say that in my opinion one cannot take it for granted that a woman will not become pregnant during the first six months of lactation.

Would you say it was a small proportion?—I should not say minute, but I might say fairly small.

Do you think there are figures extant on that point?—No, but all German sexologists agree that too much importance has been placed on lactation as a protection against pregnancy.

MR. BOND: In the six months of lactation, do these women who become pregnant menstruate?—In a great many of my cases they have not menstruated and yet they have become pregnant.

SIR ARTHUR NEWSHOLME: We will now go on with the artificial methods.—We now come to the so-called artificial methods of contraception. I do not believe that we know at present of any one-hundred-per-cent. perfect contraception method, though certain pre-

cautions seem to be almost perfect. In cases where parenthood is absolutely and permanently undesirable, I recommend sterilisation, preferably by ligature and section of the sperm ducts in the male or by removal of both Fallopian tubes in the female.

You definitely limit it to medical reasons?—Yes; but I must add that one should consider economic reasons and prophylactic reasons as well. If a woman's health is already very greatly lowered by excessive childbirth I think that sterilisation may be advisable and may be ethically permissible.

Would you practise it in such cases with the consent of the patient in lieu of mechanical contraceptives?—Not for preference; but in those particular cases where women have had a large number of children it is often impossible to give them any reliable contraceptive, because they may be so torn or stretched by frequent childbirth that it is impossible for any contraceptive to be efficient.

DR. GILES: I take it that you would not recommend sterilisation on economic grounds, but only on medical grounds?—Yes. If a woman has had eight children and her health is poor, and it is impossible to fit her with a pessary, then I think it would be permissible to sterilise. I certainly should not advise that a woman who has had one or two children should be sterilised, except on direct medical grounds. I think there is a distinct difference between the woman who has had eight children and the woman who has had one or two.

DR. HILL: Whether it is considered ethically right or not for a man to have his sperm ducts tied I cannot say, but has he them tied to prevent old age nowadays?—I

have done some of those operations for old age. Before I did so I obtained Counsel's opinion, and I was informed that there was no law in England against sterilisation with the patient's consent—largely because the law never envisaged the possibility. I think the general ethical opinion would be that if one sterilised a man for a frivolous purpose, one would be condemned.

SIR ARTHUR NEWSHOLME: Ethically you would limit it to cases in which there was a medical desirability?—Yes. I sterilised an epileptic in his own interests, as he wanted to marry, but felt that he should have no children.

How many years ago was that?—That was in either January or February of 1921, and I last saw him two months ago.

What is the subsequent history?—It is so good I hardly like to tell you, in case it should seem exaggerated.

Any other questions on this point? Then we will go on.—In cases where it is relatively or temporarily undesirable, I recommend the use of an occlusive pessary manufactured according to my prescription, and known variously as the Mensinga Pessary, the Dutch Pessary or the Haire Pessary, in combination with a contraceptive jelly. In the absence of possibility of using this method, some of the other methods are certainly better than no method at all, but, on the other hand, some methods are definitely harmful and most are more or less unreliable. Perhaps the commonest of all attempts at birth control is withdrawal, or coitus interruptus.

I should like to comment upon other methods.

Prolonged Lactation.—Some people believe that a woman is unable or unlikely to fall pregnant while

suckling her last child, and women frequently keep their babies on the breast for periods varying up to two years for this purpose. I have never known it to be permanently successful, though it does seem to render impregnation less likely. It is frequently harmful to both mother and child.

Chemical Contraceptives.—Chemical contraceptives may be used in the form of greasy vaginal suppositories, as effervescing or non-effervescing tablets, as oils, ointments or jellies, or in watery solution. They all aim at killing the spermatozoa by chemical action, and some aim at washing away the spermatozoa in addition. But all share the disadvantage that they can affect the semen only while it is in the vagina. It is believed that at the moment of orgasm some or all of the semen may be aspirated into the uterus. If this is so, any semen so aspirated directly into the uterus will not have been completely in contact with the chemical contraceptive in the vagina, and so will be immune from its action. Further, we know of few substances which will certainly kill spermatozoa, and which at the same time are innocuous to the tissues.

The vagina normally contains an organism known as Doederlein's Bacillus, which produces lactic acid and acts as the policeman of the vagina, keeping out harmful organisms. The normal reaction of the vagina is therefore acid. Spermatozoa cannot live in an acid medium, and Nature has therefore provided the woman with a secretion of alkaline mucus, which is poured out during intercourse, to neutralise the reaction in the vagina and so provide the most favourable environment for the life and activity of the spermatozoa. If we wish to kill

the spermatozoa, we have only to restore the acid reaction ; and it seems only common-sense to use lactic acid, to which the vagina is accustomed, in preference to any other. Most of the chemicals which are commonly recommended for use as douches kill or damage Doederlein's bacillus and thereby lower the resistance to pathogenic organisms. I believe that lysol, mercurial and hypochloride douches very commonly give rise to inflammation and discharges, and I have recently seen severe discharges following the use of chinosol.

Vaginal Suppositories.—Suppositories are most often seen in the form of the so-called "quinine suppository," or "quinine pessary." This consists of a small amount of cocoa-butter or gelatine, in which is incorporated a small amount of quinine. One of these is placed in the vagina shortly before intercourse, and is supposed to melt and spread over the vaginal interior, ready to kill the spermatozoa as soon as they are shed. The quinine suppository cannot affect any semen aspirated directly into the uterus.

Quinine in Oil.—A mixture of oil and quinine is sometimes used. This has little advantage over the quinine suppository, and needs the use of a special syringe in addition.

Ointments.—Ointments are often used, quinine and boracic ointments being perhaps the most usual. While I think they are very little use alone, I regard them as useful when employed as an additional safeguard in combination with a suitable occlusive pessary or condom, and I used to advise boracic ointment to be employed in this way.

Contraceptive Jellies.—Contraceptive jellies are much used, but no reliance is to be placed on them if used alone, though they are useful if employed in combination with a good occlusive pessary.

Lactic Acid Jelly.—I have had a jelly prepared containing lactic acid, 1 per cent. boracic acid, which does not seem to harm Doerderlein's bacillus, glycerine and starch powder. This is the best chemical contraceptive I know; but I do not regard it as thoroughly reliable if used alone, for one cannot be sure that it comes in contact with the whole of the semen, and I therefore recommend it in combination with the occlusive pessary, which I will describe in detail later.

Douches.—Watery solutions of chemical contraceptives are used in two ways. They are used, firstly, as douches. Here the chemical action of killing the spermatozoa is supplemented by the mechanical action of the douche in washing away the semen. If douches are employed as an accessory to the use of a good occlusive pessary they are really valuable; and for this purpose I recommend a solution of soap in water, or lactic acid 1 per cent. The former acts as a spermatocide by virtue of its alkalinity. The douche is used to wash away the semen which has been kept from entering the os uteri by the occlusive pessary.

Sponge or Tampon.—If this method is to be used at all, an artificial rubber sponge, which can be boiled, or a cotton wool tampon, which must be used only on one occasion, is preferable.

Krull's Tampon.—In Germany Krull's tampon is very popular. A sponge about the size of a small apple is

cleaned and dried and laid on a piece of gauze which is wrapped loosely round it, leaving room for the sponge to swell, and a thread is attached. It is wetted with water and squeezed out, then saturated with a 20 per cent. solution of boric acid and pushed into the vagina through Krull's Introducer, which is really only a special sort of vaginal speculum. The thread hangs out of the vagina so that the sponge may be easily removed the morning after coitus.

Mechanical Devices. Condom.—There are a number of mechanical devices which aim at mechanically preventing the semen from reaching the uterus. The commonest and best known of these is the sheath or condom.

Female Sheath.—Another rubber device is known as the female sheath. This is a stout sheath, which is lubricated inside and out, and pushed into the vagina.

Intrauterine Pessaries.—There are a number of intrauterine pessaries of different types. Perhaps the best known is called variously the "Gold Pin," "Wishbone," "Butterfly," or "Brooch Pin." This is not a contraceptive but an abortifacient and very dangerous.

Stud Pessaries.—In Germany, and elsewhere, a much cheaper pessary consisting of a glass button, with strands of silkworm-gut to form a stem, is used for the same purpose. These too are dangerous abortifacients.

Cervical Caps.—Many attempts have been made to invent a satisfactory metal *cervical cap*. One of the best known is the *Kafke cap*. These are unreliable.

Rubber Cervical Caps.—The best known of these is the "Pro-Race," but they are all difficult for the woman to use. They are supposed to adhere by suction, but a very

slight movement suffices to dislodge them even if they have been properly placed in the first instance.

There are a number of small rubber caps of slightly different form, but of the same main type, and all are unsatisfactory. I have no personal experience of the Mizpah pessary.

Vaginal Occlusive Pessaries.—In Germany and Holland I have seen a number of rubber occlusive pessaries of complicated shape, known as the “Graziella,” the “Carlet,” the “Matrisalum,” etc. All these are difficult for the woman to place herself and unreliable.

The Best Contraceptive.—The best contraceptive, in my opinion, is an occlusive rubber pessary modelled on that invented by Mensinga. These are now used largely in Holland and England, and are known as the “Mensinga,” “Dutch,” or “Haire” pessary. (The same type of pessary, but with a spiral spring, is known as the Ramses. The spiral spring easily twists into a “figure of eight” if it meets with any obstruction during introduction.) I have had made for me a simple hemispherical rubber diaphragm, fortified by a flat watch-spring at the circumference. It is compressible for introduction, and is inserted so that the convex side is towards the cervix and the concavity towards the vaginal opening. The spring rests anteriorly behind the pubic bone, and posteriorly on the back wall of the vagina, high up. The spring and muscular walls of the vagina adapt themselves mutually, even during the movements of coitus, with which it in no way interferes. The whole of the vault of the vagina is occluded, and the semen denied access to the os during coitus. But when used alone, a small percentage of

failures occur, because it is possible, though not easy, for a spermatozoon to find its way, after coitus, round the edge of the pessary between the pessary and the vaginal wall. So I began to advise that the pessary should be lubricated with boracic ointment; so that, if a sperm cell attempted to get round the edge of the pessary, its movement would be mechanically hindered by the grease and it would be killed by the boracic acid. This was more satisfactory, but the grease in the ointment destroyed the rubber, so I devised a non-greasy lactic acid jelly to be used instead of the boracic ointment. This contraceptive jelly bears the name of *Contraceptalene*, and both sides of the pessary are smeared with it before insertion. Once the pessary is in position neither the woman nor her husband is conscious of its presence, and it does not decrease sexual satisfaction for either party. It is made in seventeen different sizes, varying from 50 to 90 millimetres in diameter, the sizes 50 to 70 being most commonly used. It is essential that it should be fitted in the first instance by a doctor, because if a size too large or too small is chosen it will not protect adequately. The patient is then shown how to place it in position, and most women find this quite easy. I have only found four women who could not, or would not, learn to use it. It may be inserted before going to bed at night. If intercourse takes place the woman need not rise to take any precautions, but may go to sleep without fear. The next morning, as soon as she gets out of bed, she should douche with soapy water, then remove the pessary and douche with soapy water again. And here it may be opportune to point out that a douche should always be taken lying down. If the woman sits or stoops,

the muscles are pressed together, and the water does not get right up to the vault of the vagina.

The presence of a retroversion or retroflexion makes the insertion of this pessary a little more difficult, but if the woman be then told to push it backwards more than upwards the difficulty will generally be easily surmounted.

Severe perineal tears may render it impossible for any pessary to stay in. In such a case the pathological condition should of course be treated, and after a perineal repair the pessary may be fitted.

A most important point, and one which I have never seen referred to in any discussion of contraceptives, is this : a woman wearing any sort of occlusive pessary must be warned against severe constipation. A distended rectum bulges into the vagina and renders difficult the introduction of any occlusive pessary. I cannot sufficiently stress the insecurity attendant on severe constipation.

I am frequently asked how the doctor is to decide the correct size of a pessary for any given case. This is a matter of experience and everyone will make mistakes at first, but the best rule I can give is this :—Fit the biggest size which will go into the vagina without causing any discomfort to the patient.

This combined method of occlusive pessary plus contraceptive jelly is perfectly harmless and undoubtedly the most reliable method available at present, but in the presence of a torn perineum it is not advisable, because in such circumstances one cannot depend on its being retained in position. If a patient with a torn perineum comes to me for contraception I advise her, of course, to

have the perineum repaired, but in the meantime I tell her to use the contraceptive jelly smeared on a tampon of cotton wool which has been wrung out in 1 per cent. lactic acid.

Sterilisation.—In certain cases it may be necessary or desirable to ensure absolute and permanent sterility. There are many diseased people who are definitely unfit for parenthood, and many others who are relatively unfit. I understand that sterilisation may be effected by the application of X-rays, but that at present the ultimate results of this method are uncertain.

I myself am at present inclined to regard surgical methods of sterilisation as the best available. Bilateral vasectomy in the man is infallible as a sterilising agent, and the operation is so simple that I sometimes do it under a local anæsthetic. The patient need not be absolutely confined to bed, but should rest for three or four days after the operation. I ligature the sperm-duct in two places an inch or two apart and remove the intervening portion. In the female I effect sterilisation by complete removal of the Fallopian tubes. This is not a very serious operation with modern aseptic surgery, but it entails rest in bed for a couple of weeks. Dr. Dickinson of New York has devised a minor operation which closes the uterine openings of the Fallopian tubes by intra-uterine cauterisation.

Vasectomy and salpingectomy are quite harmless and do not at all decrease sexual desire, potency or pleasure. The male still has an ejaculation which to the naked eye appears normal, but under the microscope is seen to lack spermatozoa.

In conclusion I should like to stress the necessity for the study of contraception by the medical profession. Only when methods have been employed by large numbers of people, and the results carefully observed and tabulated, is it possible to form a reliable opinion as to the comparative values of various contraceptive procedures. Local, national and even international medical conferences are vitally necessary for the mutual discussion of individual experiences, and I hope to see considerable time devoted to this question at future medical conferences in various countries. Only recently in England have the medical journals opened their pages to the discussion of contraceptives, the *Lancet* leading the way in July 1922 with a two-page report of the Contraceptive Section of the International Birth Control Conference, and the *Practitioner* following in July 1923 with a special number devoted to Contraception.

Unless our profession devotes far more attention to the problems of contraception, the Birth Control movement will remain in the hands of unqualified persons.

Have you had any failures with the use of the pessary plus the lactic acid jellies?—Yes, a little less than five per cent. failures, but when those cases were analysed it was found that many of them could not be called failures, because the method had not been used properly. A great many cases have come along and maintained that the pessary had failed, but on careful examination we found that the patient had not douched herself, as she had been instructed to do.

During what period have you used this combination of jelly and this particular pessary?—Since early in 1923.

Over what period have you watched the cases?—Three and a half years.

And during that period there was something under five per cent. of failures, some of which are not real failures?—Yes, between four and five per cent. But a great many of them would definitely be ruled out, as they admitted they had not used the pessary on all occasions.

Is it not the case that the application of these pessaries by a woman must be very difficult, almost impossible?—In my experience the women are unable to apply the cervical cap, but are able to use the pessary I recommend.

Have you had patients come to you and state that the cervical cap had failed and ask for a better method?—Yes.

How many, do you think?—Somewhere between fifty and one hundred at least. I not only have them coming and asking for a better method, but I have them coming and asking for an abortion.

You think the ordinary woman can put the pessary you recommend up successfully?—Yes.

Have you ever seen this instrument in situ after sexual connection?—No.

What keeps it up the vagina?—It fits tightly because of its spring.

(A discussion then took place on the position of the pessary in the vagina, and it was suggested that if possible an X-ray photograph should be obtained.)

DR. NORMAN HAIRE

(*Recalled and examined*)

DR. HAIRE: At the conclusion of the last meeting I said that I would get some X-ray photographs of the pessary inside and we have made three attempts without success. The X-ray man says he is afraid he could not get a picture that is any good. Now a very important objection seemed to me to be that raised by the Chairman, and supported by some of the other gentlemen, as to the position in which the pessary lies in the vagina, and I have spent a good deal of time since then in trying to clear up the point. I have very carefully examined nineteen or twenty women with the pessary inside since I saw you last, and I must still maintain that the pessary lies obliquely across the vagina canal, and not in the long axis of the vagina. I have an illustration here from a German textbook of another pessary which is shown lying across the vagina, and I will indicate the way in which I say this pessary lies. If you use *too big a size* it will lie in the long axis of the vagina. That, I think, gives rise to the mistake. I might say that at first I used to fit too large a pessary, and I found later with more experience that if you use a smaller size it will take up the position I have described. The objection raised by the gentlemen on the Committee appears to be mainly theoretical, whereas my standpoint is based on actual observation of thousands of cases. However eminent the authorities are, I must refuse to accept their opinion until they have actually undertaken the examination of a large number of patients

with the pessary inside. It does not matter what the *theory* is as to how it lies. Theory has nothing to do with it. What is important is the way it *does* lie when it is examined by anybody on the Committee.

DR. DUNNETT: I obtained a Haire pessary and selected a patient for the experiment. At the time it fitted very well, and I asked the patient to keep it inside, but when I examined her the next day found that it had shifted.

DR. SPENCER: There is no question but the ring pessary must lie in the axis of the vagina and not across it. In this illustration there is a handle which prevents it going round?—I think if you examine this pessary you will see there is a considerable difference in it and the ring pessary. This is a very light spring, and it is more easy of movement. I should like anybody who criticises my view to draw their experience from this pessary, and not from some other pessary which they think is like it. I suggest that any gynaecologist should examine this in a hundred cases and give us his revised opinion.

THE CHAIRMAN: I have examined a number of cases with this pessary in; I have examined three this week, and the pessary lies in the long axis of the vagina. I think it is a very good pessary for the work it does, but I think you are entirely scientifically wrong in saying that it is not in the long axis every time, because it is.

SIR ARTHUR NEWSHOLME: Is it not possible that the difference between the opposing statements may be the difference between the position at the time the pessary is placed there and the position in which it is in twelve hours later?

THE CHAIRMAN: It moves from the original position.

WITNESS : I am willing to place this pessary in position in the presence of the gynæcologists and we will examine it together. My contention is that the patient is told to use the pessary in a certain way. If she uses it in any other way or leaves it in a long time, it is quite possible that it will cause harm. If she uses it without the jelly it is more easy for the pessary to fail, but the patient is instructed to take it out after twelve hours, and on no account to leave it in more than twenty-four hours. That is my first point. Now an objection that is frequently raised is that the pessary may act as a foreign body and cause trouble and inflammation or a discharge. The suggestion is perfectly ridiculous that any pessary can give rise to a discharge in twelve hours. If the pessary is left in too long it might give rise to inflammation, but that is no argument against the pessary, it is only an argument against the way in which it is used. Another point that is frequently brought forward is that the woman may introduce sepsis into the vagina by using dirty fingers. Anybody who has any experience of the poorer and the less cleanly classes will understand that the woman is no more likely to introduce dirt with her fingers than her husband with his dirty genitals. There is one point which arose out of what Dr. Dunlop said—I would suggest that it is no good asking: Is birth control injurious? We ought to be studying each method separately and ask: *Is this method or that method injurious?* otherwise people are talking vaguely about all the different methods and they have not been studied properly separately.

THE SECRETARY : Is anyone making any real scientific experiments to discover the actual value of various

methods?—I do not know that anybody is doing any laboratory work or research. I have at present a thousand pounds in the bank given by a wealthy patient who has promised a thousand pounds every year. He suggests that a clinic should be started at which contraceptive advice should be given only to patients sent by medical men or women, so that no possible objection could be taken, as only women would come for instruction who really needed it. He suggests that I should gather there a consultative committee of gynæcologists and statisticians, who would in the first place collaborate to draw up such a history sheet as would throw light on all points that they collectively think are required. The work should be under the scientific supervision of an expert committee who would review the cases from time to time, and say : Now we do not think that this or that is a satisfactory result, we suggest that such-and-such a thing is best, and tests should be made to get the required results. We are just waiting now to see what is going to happen before we start it, and I have written to Dr. Giles about it. If such a clinic can be of any service to this Committee it is at its disposal, and we are ready to accept the most stringent conditions so that we can do some proper research. We want to lay down a scheme so that we will have a large number of cases carefully followed up, and I propose that we shall not take any statistics of cases unless we have had them a year, and that we do not take any statistics of cases in which we do not think the reports are reliable.

SIR ARTHUR NEWSHOLME: I think that if this Committee were to make itself responsible for anything of that kind they would have to be completely responsible, and

that they would not be merely affiliated to those running the Committee, but they themselves would have to be the rulers of the whole concern. I also would suggest another thing, and that is that there should be associated with Dr. Haire, on an equal standing, some other doctor who is concerned in the matter. Those two considerations occur to me on the spur of the moment. I think it would place this Committee possibly in a somewhat difficult and doubtful position unless they themselves were, or a committee appointed by them, in complete control and completely responsible for it. I do not think that that need cause any difficulty. Perhaps we can have a letter from Dr. Haire as to the offer?

DR. HAIRE : Before I can make any definite offer I must see the donor.

SIR ARTHUR NEWSHOLME : Hearing the conversation and the discussion on the use of this particular pessary, it occurred to me whether it might not be an academic point as to whether this pessary lies horizontal or vertical, in view of the Chairman's statement that a jelly is kept in position, which is an efficient agent for contraception.

DR. HAIRE : While still refusing to accept the statement as to it lying in an improper position, I will say it is very good in practice. In the first 800 cases I used it without a jelly, then with boracic ointment, and then later with the lactic acid jelly, and it is very successful.

X

STATEMENT BY

R. A. GIBBONS, M.D., F.R.C.S.E.,
Gynæcologist to the Grosvenor Hospital for
Women

IN the following I am only dealing with conception control from a purely medical point of view. There can be no question that the teaching of methods of birth control has had an enormous influence on the lives of married women with regard to lessening the number of births, and also on the lives of many unmarried women. In my opinion, and I have had the experience of practising amongst women, both in private and hospitals, for many years, this influence, which was hardly felt when Bradlaugh and Mrs. Besant published the *Fruits of Philosophy*, has steadily increased, and is reaching every stratum of society, except perhaps the very lowest, where the men and women will not take any trouble about such matters.

From the papers which have been handed to me by Mr. Gibbs, I select the following points on which to make remarks.

1. *The influence of contraceptives on health.*—With regard to the effect on the health of both men and women, I can only speak of my knowledge regarding the actual effect on women, for what I know regarding men, as I do

not attend them medically, I only know from what they happen to have told me when I have been seeing their wives in confinement, or for other reasons, or from what I have heard from the wives when consulting me about internal ailments.

As to any influence the practice of conception control has on the health of men, I should say, from all I can gather, that it is entirely a matter of temperament. With some, certain methods do not appear to affect them at all, but there are others who certainly seem to suffer from irritability of the nervous system, particularly because they have to use contraceptives, which they dislike, in their anxiety to control their families, or go without intercourse. There are others I have known who rather than use any of them would forego intercourse until they reach the "safe period" after the cessation of menstruation. The great majority of men greatly dislike the condom, although it is the safest when properly used, and some I have known, who have used them after the birth of the first child in order to limit their families, have been obliged to give them up, for they were so disturbed that they could not even commence the sexual act.

I have found that what most husbands prefer are chemical pessaries when they are not inserted in their presence, for they can have intercourse without any disturbance.

With regard to some women, from what I have gathered, I know that many who desire no more children, only tolerate intercourse when contraceptives of any kind are used to please their husbands, and the effect of their use is so irritating to them that they would rather dispense

with intercourse. Some women have told me that when contraceptives have been abandoned they have enjoyed normal intercourse. Others, again, have stated that they would rather use any contraceptives than go without intercourse.

In certain patients of my own, they have told me that when their husbands have used the condom they have become extraordinarily irritable. One lady, who was anxious to have a child, on the sight of the preparation for the condom became so hysterical that all thought of intercourse had to be given up, and I advised the husband to give up all contraceptives for the sake of his wife, which he did.

It must be remembered that in ten per cent. of women there is a congenital absence of the sexual centre, and there is no sexual feeling. Although these women may conceive, they are not disturbed mentally by any form of contraceptive.

As to the health when coitus interruptus is practised, I am quite certain that it has a most prejudicial effect on the nervous system of women. Under my own care I have had now many neurasthenic cases which I have entirely attributed to coitus interruptus. When this has been stopped, the nervous symptoms have gradually passed off. The reason of this is that there is sexual excitement without gratification, and I have heard from women themselves of the hysterical state into which they have been thrown. As to the effect on men, it is entirely a matter of temperament. Some do not mind it at all, others practise it with dislike, but as a means easier in their opinion to prevent conception than any other.

With reference to the influence of contraceptives on the general health of women, with the exception of what I have mentioned, I have nothing definite to found an opinion on, except the statement of some patients to me after having used them for a considerable time and then given them up, that they (and in some cases their husbands) have felt better in health. There are, however, very many women who use all kinds of contraceptives and who appear to be in good health.

The influence on health of partial or complete abstinence both on men and women.—I have known complete abstinence practised for many years in certain cases, but I consider this is very exceptional. In cases which I have had knowledge of, the husband has practised complete abstinence in order that (a) his wife may not have the risk of a child, having already had more than one, and (b) because he thought his wife, who had never conceived, too delicate to be allowed to conceive at all. In the extremely few instances of this which have come under my notice, the husband was so much in love with his wife that he dreaded the slight risk to her life of confinement. In one case, he told me that his abstinence was extremely trying, but for the sake of his wife he would not break it, and he would not risk any chance by using contraceptives of any kind.

As regards entire abstinence, which is so rare, it wholly depends on the temperament of the man, and in discussing even temporary abstinence with some husbands on account of certain conditions of their wives, they have told me that they cannot abstain from intercourse. I have been quite certain, in the case of some men, that

if they could not have intercourse with their wives they have had it elsewhere. Others have admitted this during the confinement of the wife. These men have been comparatively young. Such men will insist on contraceptives rather than even wait until what some term the "safe period." Such information as I have been able to obtain has generally been given to me during the month of confinement, when intercourse is impossible, and when I have had many opportunities of ascertaining the views of men who, for the moment, are obliged to abstain.

Although I know from conversations with men that abstinence during married life is sometimes trying, I do not consider that in the majority of men it is detrimental to health. It is, however, a matter of temperament, and whilst some might feel that it is impossible to carry out, others are in no way affected. The age of the man has naturally much to do with the consideration of this subject. We know that it does not create any changes in the testicle, which after the absence of years may be called upon to resume its natural function. In this respect it may compare with the breast.

The reliability or otherwise of the so-called "safe period" as a preventive against conception.—The so-called "safe period" is resorted to by many who will not tolerate any contraceptives. Here again it is a matter of temperament, for regular intercourse cannot take place, and in dealing with this subject, it must be remembered that it is not always the husband who decides the time, but the wife. I have known many who used contraceptives because they would not be debarred from intercourse, when the husband would be quite willing to wait for the

“safe period.” I consider that the so-called “safe period” is the only method which can be adopted if ordinary natural intercourse is to be sought. In my own experience I have had many patients whom I have attended during their confinements, and who have adopted this method by my suggestion as being the least objectionable, when they have told me that for serious reasons they were most anxious to avoid having more children. Indeed I may say here that this is the only method I have ever advised. I have the notes of some who practised this in some cases for eight years, in other ten years, and in each case I have attended the wife when the rule has been broken. Although nothing is absolutely safe, I have found that if intercourse is abstained from for ten days after the cessation of the period, and three days before the next menstrual period is expected, conception is not so likely to occur. There is, however, no certainty about it. I know that this method is followed by many Roman Catholics, who are not allowed by their Church to use contraceptives.

The influence of the “safe period” on the woman’s health.—I have known many patients who have adopted this method, and have felt obliged to give it up because they desired more frequent intercourse, and the husband has used some contraceptive in order that the wishes of his wife might be carried out. I have also been told by the wife that she has been obliged to use some contraceptive because her husband would not continue abstinence, and would not use any conception control device.

As regards the influence of the “safe period” on the health of the woman, I have had no evidence that it has

been in any way injuriously affected. It is true that I have been told by some women that they have given it up occasionally and used pessaries because they have felt irritable and unhappy without more frequent intercourse and would not wait for the allotted time. I had no evidence to offer as to the practice of abstinence disturbing the regularity of menstruation. I think if such had been the case I should have some notes about it.

The influence of male secretions on the health of the woman.—I have no notes regarding this, and have no evidence to offer which goes to show that there is proof of their efficacy or otherwise.

The length of time during which the male elements remain viable in the female passage.—If mucus from the vagina be examined within an hour after coitus, there will be found many dead and many living spermatozoa, but most of them lose their motility within fifteen minutes after coitus, and the vast majority are dead within an hour, although, rarely, some living ones may be found two hours afterwards. This is because the vaginal secretion is acid, and is inimical to the life of the spermatozoa. The alkalinity of the spermatic fluid is to overcome the acidity of the vaginal mucus. Live spermatozoa have been found in the cervical mucus after seven days. Living spermatozoa have been found in the cervical mucus after three days, notwithstanding carbolic douches twice daily. The longest case on record is that of live spermatozoa being found in the cervical mucus eight and a half days after coitus.

7. *Various contraceptives used.*—According to the information I have obtained from patients whom I have

attended, I should place the following contraceptives in the order in which I have ascertained them to be most frequently used :—

The condom, coitus interruptus, chemical pessaries, antiseptic sponge, rubber pessaries, douches.

I may state at once that I consider none of them safe. I have attended many confinements due to the failure of one or more of the above. The condom is certainly most likely to be efficacious, but it occasionally breaks or tears. Coitus interruptus is by no means safe, but it is so frequently practised because it is least troublesome. I believe that chemical pessaries are very largely used, and I have known them to be efficacious for years, but they have failed in the same patient more than once. The antiseptic sponge seems to be effective, but is not so commonly used in this country as in France. Rubber pessaries frequently fail because they are improperly applied, but even when inserted with care are not always effective. Douching is not so commonly used as formerly, for it has frequently proved a failure. The reason of this is that if intercourse is normal, on account of the dilatation of the cervix some of the spermatozoa are received into the uterus at once, and by the time the douching is commenced it is too late to be of service. I have attended many confinements due to the failure of the douche. I may add that I am certain some women have caught serious chills through douching in winter, and I have known disturbance set up internally from the use of cold water and also from strong antiseptics.

8. *Conception during lactation.*—It is undoubted that, as a rule, conception does not occur during lactation.

There are, however, many exceptions. I have known many husbands who, believing this to be the rule, have had intercourse in the ordinary manner, which has been followed by conception. It is by no means reliable, although I have had many patients who have continued nursing far beyond what is necessary in order to prevent conception.

9. *The innocuousness and reliability of various methods.*—With reference to reliability, I do not consider that any are perfectly safe. As to innocuousness, some seem to have no deleterious action on the mucous membrane of the majority of women, such as the condom, rubber pessaries when properly cared for, the sponge, and ordinary douching. Chemical pessaries, however, do seem occasionally to cause irritation to sensitive mucous membranes.

There can be no doubt about the action of all contraceptives in the production occasionally of sterility. In my own experience I have had patients who have used them for a considerable time, have then given them up in the desire to have a child, and have never been able to conceive—the pelvic examination proving normal. This is the same in the animal kingdom. If the buck be withheld from the doe during œstrus, sterility may follow. This has so often occurred in my own experience that it seems logical to assume that contraceptives are the cause in women who appear to be healthy. It is, of course, possible to say that such cases are coincidences.

It is believed by some that chemical pessaries set up a certain amount of endocervicitis, leading to sterility. Some are of the opinion that contraceptives are apt to lead to the formation of fibroids, and others have the

impression that the increased insanity between forty and fifty in women may be due to the endeavour to arrest the natural functions of the reproductive organs in certain cases.

In concluding my remarks, I should like to say that in order to determine the actual effects of contraceptives, we ought to have careful and reliable notes concerning very many cases. General impressions, although most valuable in those of most experience, are not sufficient for scientific accuracy. Concerning the condition of sterility being caused by contraceptives, I have in my own mind no doubt whatever, and this opinion is corroborated by some of great experience. Certain neuroses attributable to the continued use of contraceptives want further investigation. But certainly these conditions seem to point to the fact that Nature is an implacable enemy, and that physiological laws cannot be broken with impunity.

XI

STATEMENT BY LORD DAWSON OF PENN

THERE are various reasons—economic, social, moral and religious—which lead the parents of to-day to control the number and spacing of their children. To ask that this generation should go back to the helter-skelter method of having families is like crying for the moon.

Means for checking conception, such as prolonged lactation, were used during the Victorian era; nevertheless families were large. Reduction of the number of children has now become a necessity, and if the same type of people are to have smaller families they must either abstain from sexual intercourse when conception is not desired, or they must use means to prevent intercourse from resulting in conception. That is to say, the alternatives at the present time are abstinence and some method of conception control.

If parents are to limit births by abstention from sexual intercourse it will be necessary to alter the conditions of our social life; for efficient abstention means celibacy for prolonged periods. Let us take the case of a man of twenty-four who wishes to marry a girl of twenty. He can afford to have one child, but marriage is impossible if it is to mean a series of subsequent children at intervals of one or two years. Such a man cannot marry unless

he knows that he can stop at one child for some years, and although I would sooner see the gap between the second and third child, the fact remains that circumstances often require a considerable interval after the first is born. How is this interval to be secured? Are we to invite the young man and woman to abstain from cohabitation for two or three years? A single intercourse is enough to bring about pregnancy in large numbers of people. The couple live in villa, bungalow or tenement, and occupy the same room. If we want them to abstain we must ask them to live in separate houses. Yet if the marriage is to be a success it is necessary that relationships should be intimate. The fabric of the "home" envisages periodic sexual satisfaction, without which love and even health are endangered. The critics of birth control content themselves too much with high-sounding phrases and ignore the realities which determine the solution of this problem.

Abstention, to be effective, constitutes a demand impossible for the mass of married people to meet. Efforts at such abstention produce a strain harmful to health and temper: if they do not succeed, the minds of husband and wife are troubled by anxieties and conflicts which do them damage, and if they do succeed in preventing conception there eventuates the prevalence of sex excitement, followed by abortive and half-realised satisfaction. Moreover, there is an increased susceptibility of the man and woman to outside sex temptations. Birth control by abstinence is either ineffective or—if effective—pernicious.

To consider the alternative—the control of concep-

tion whilst intercourse is continued. In one form or another such control has long been practised, and the Roman Catholic Church, by sanctioning cohabitation during the "safe period," has conceded the principle that it is right to have an intercourse which has not the immediate object of conception and which reduces to a minimum the chances that such will occur.

A method of contraception should be judged according to its fulfilment of three conditions: (1) it should be effective; (2) it should produce no physical or mental damage, and (3) it should be consistent in its application with sentiment and refinement. Restriction of intercourse to that part of the inter-menstrual period when conception is least likely is unsatisfactory, because this period is in general the time when a woman's desire is at its lowest. The proper time for intercourse is when the desire is mutual. Those who recommend that it should regularly take place during the "safe period" and condemn other contraceptive methods as "unnatural" are inconsistent. What could be more unnatural than to restrict intercourse to the very time when Nature has least intended it?

Similar violation is done in another way, by the practice of congressus interruptus (withdrawal), because it necessitates control at a time when there should be no control; because it is apt to leave the woman unsatisfied, and because it involves emotional strain.

By exclusion this brings us to contraceptive methods which depend on some device for preventing access of the semen to the uterus or for preventing fertilisation. There is no doubt that a perfect method of this kind has

yet to be discovered.¹ The determination of further and very necessary knowledge as to the best methods of contraception can only be obtained by animal investigation and carefully collated records in special clinics and private practice. This inquiry will give a desirable stimulus to such investigation.

In my judgment there is no evidence that the use of contraceptives as such does either physical or moral harm to those who practise it, nor do I think that the use of checks leads to excessive intercourse.

When I read gloomy forebodings as to the break-up of home life, I console myself with the thought that these prophets "of little faith" are interpreting change as decadence, and that, if they would go and look, they would find the homes in all classes of Society different somewhat, it is true, from the homes of their own childhood, but not one whit less ordered and happy, controlled more by understanding influence and less by duress than their homes were, and peopled by children equally lovely, loving and lovable.

Meanwhile, it is well to state the opinion that families which are too restricted have their dangers and that here and there restriction is too great. It is important for the health of the mother that the complete cycle of maternity should recur sufficiently. Children need each other and keep their parents young. The single child is at a disadvantage as regards discipline and happiness and is apt to lack initiative and adventure.

¹ Expressions of opinion by individual members of the medical profession on methods of contraception have to be restrained in order to avoid too wide publication or exploitation for commercial purposes.

178 MEDICAL ASPECTS OF CONTRACEPTION II

If our "pastors and masters" would but accept control of conception as a necessary feature of our present-day civilisation, and still more, cease from feebly excusing it on so-called medical grounds, and, on the other hand, unite in bringing before the public the importance of adequate parenthood, constructive guidance would take the place of futile controversy.

XII

SUMMARY OF EVIDENCE GIVEN BY DR. H. CRICHTON-MILLER

Importance of discarding traditional bias.

Evolutionary trend of life.

Hedonic and procreative sides of sex function.

Increasing separation of these two sides.

Infanticide—abortion—coitus interruptus.

Abstinence.

Positive loss involved by the latter : feasible for some.

The problem of conjugal adjustment.

The freedom implied by contraceptive methods : its use and abuse.

The lure of a fool-proof system of ethics.

The monogamic ideal as the sole eugenic ideal.

DR. CRICHTON-MILLER : I should like to say that I agree with practically every word Lord Dawson has said. I think I can satisfy in some ways his most acute critic, Dr. Herbert Spencer, by saying that I am the father of six children, and that these children have not been born "helter skelter" (to use Lord Dawson's phrase), but have been spaced. That gives me a certain status in discussing the use of contraceptives. All the criticisms of contraceptives can be reduced, I think, to the one heading of not wanting to give complete freedom to the

community in the matter of sex relations because of the fear of its being abused. Dr. Spencer tried to make out a case for parenthood, but, as Lord Dawson has repeatedly emphasised, adequate parenthood is the gospel that should be preached along with instruction in contraceptives. I should like to focus the attention of the Committee upon the evolutionary point of view. We want to know what are the conditions under which a child has the greatest chance of growing up to the fullest realisation of its inherited potentialities. Dr. Herbert Spencer has referred to the social climbing instinct as an unworthy deterrent of adequate parenthood. It is impossible to over-stress the psychological disadvantages of the only child. Nursery education is the most effective of all education; brothers and sisters are the most successful of all teachers. No thinking man who belonged to a family of reasonable size could possibly wish that he had been an only child. But there are those whose remedy for the disaster of the only child would be to prevent his parents knowing how to achieve such a situation. Surely the argument is very fallacious? It is the old fallacy of withholding freedom because some people will abuse it. If knowledge of contraceptive methods can serve a good purpose, we are not justified in withholding it because in the hands of some it may serve a bad purpose.

The next point, from the side of the child, is what intervals are desirable. Lord Dawson admitted that there was occasionally economic necessity for longer intervals. I should like to point out that from the psychological point of view this is important. The child

begins life as the idol of the family and the centre of parental and adult attention, and he can be naturally and easily displaced from that position at any time up to four years. But this is the limit. If the child ceases to be the only child, or ceases to be the baby of the family, after four years, there is certain to be a warping of his character. The child will develop a jealous attitude towards the new baby, and that jealous attitude can express itself all through life. These considerations of the next generation are to me the only considerations that matter. I think that the excellent case that Lord Dawson makes for married couples living a different life from that of the Victorian mothers is splendid. But I hope that we shall all be prepared to go back even to the early Victorian life if it can be proved that in the interests of the next generation it is desirable. These paramount interests demand suitable and carefully considered spacing, and this requires not only knowledge on the part of the parents but also straight thinking. And straight thinking is difficult to ensure in the presence of a powerful emotional factor such as sex hunger. Therefore it is very desirable that the instinctive impulse should be eliminated, so that enlightened purpose and calculation should be free in the interests of the children. How many of the noisiest objectors to contraceptive practice are parents of large families? It is open to us to surmise that their objections are motivated not so much by a detached enthusiasm for adequate parenthood as by a very personal sense of unfounded self-righteousness. I think there is one point that ought to be made clear. In all matters of social liberty there are those who would like

to know that every youth who consorts with a prostitute is certain to get venereal disease; they would like to know that every pickpocket is going to prison; that every time a man has sex relations with his wife, conception is certain to follow. Now these are people who feel that human freedom and human control in life, including the human possibility of going wrong, are bad things. They want to see people punished every time they depart from the moral law. Life is not built upon those lines, and we would do well to remember that people must have freedom, and freedom always means the possibility of abusing it. What is our chief preoccupation about the knowledge of contraceptives? It is simply that we cannot trust people who are not married not to have sexual intercourse if they know how certain it is that they will not have a child.

And apart from the demands of the next generation or the requirements of monogamy, there is much to be said in favour of contraceptive practice from the point of view of conjugal adjustment and harmony. As Lord Dawson has so emphatically said, abstinence involves a strain upon one or both of the mates which, in some cases, is absolutely incompatible with health and happiness. I am sure there is no experienced doctor in my department of medicine but could cite numerous cases of unhappiness, irritability, neurasthenia, and the like, due to faulty sex adjustment which in its turn resulted from the fear of conception and ignorance of contraceptive procedure.

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