

IPPF EUROPE

Regional Information Bulletin

Vol 2 No 2 June 1973

Planned Parenthood Services in Teaching Hospitals

In the past, the IPPF Europe Region has invited health personnel in Europe, mainly from teaching institutions, to visit university hospitals in Belgium, Britain and Yugoslavia, to exchange ideas and experience in planned parenthood, and so stimulate those responsible for teaching health personnel to initiate or expand training in their own countries.

The need for such Regionally sponsored courses is now felt to have effectively ceased. Accordingly, the Europe Region sees its future role in the field as promoting Regional discussion, for example, by convening occasional meetings of small working groups.

Such a trend appears to conform with the resolution passed by the IPPF Governing Body, at its meeting in London in October 1971, as follows:

"The Governing Body, *noting* that family planning associations operating in many countries offer the only formal courses in the principles and technology of family planning for graduate and undergraduate medical students and auxiliary medical personnel, *urges* associations to use their best endeavours to influence the inclusion of formal training in the physiological and psychological aspects of human reproduction and regulation of fertility practices, as well as the relationship between population growth and economic and social development in the curricula of all medical, nursing and nurse-midwife schools and related institutions".

In December 1971 in Geneva, a WHO Study Group met to discuss Education and Training for Family Planning in Health Services (Technical Report Series No. 508). Both the Chairman (Professor P O Hubinont, Belgium) and Vice Chairman (Professor D Fairweather, Britain) of the Regional Medical Committee participated. The report viewed planned parenthood "as a way of thinking and behaving that is freely adopted by individuals to promote individual and family health and, in the broad view, contribute to the overall social development of the community. That every individual should have access to services, knowledge, and understanding of family planning as a basis for making informed, free choices regarding its practice was regarded as a human right".

As a contribution to the continuing discussion stimulated by the WHO Study Group, the Regional Medical Executive Committee has commissioned the following articles on the inclusion of planned parenthood in a university hospital context, from the point of view of both services and training, in Austria and Belgium.

Austria

All qualified physicians must spend several years in practical hospital work before becoming independent physicians. For a general physician, the period of hospital practice is at least three years; for a specialist, at least six years. Such postgraduate work is sometimes combined with specific posts in public hospitals. Thus every physician has a university training before qualification, and further practical training in a university clinic or public hospital. University clinics, and most public hospitals, even those with few special departments, count as teaching hospitals. As planned parenthood training centres, all gynaecological and obstetric departments are accepted in theory.

Planned parenthood training may be described as follows. In Vienna, Graz

or Innsbruck, medical students receive regular instruction in the physiology and pathology of reproduction, and about contraception. Training in methods of fertility regulation is integrated into the gynaecology curriculum, in lectures and group discussion. Planned parenthood and social medicine are at present not essential examination subjects.

There is an impression that the newly qualified physician today, unlike former years, is already well informed on family planning, although unable to apply his knowledge practically. In the curriculum, opportunities for learning practical family planning are limited as yet, although family planning centres have been established in all university gynaecology clinics. In obligatory practical work in gynaecology clinics, there are only two periods of six days in which the student can obtain only a very superficial picture of gynaecology and obstetrics. If a qualified physician remains in a university clinic to specialise in obstetrics and gynaecology, instruction includes complete training in family planning, with the possibility of comprehensive practical experience. A physician receiving specialist training in gynaecology in a public hospital not attached to a university has only exceptionally the possibility of training in family planning. This limitation is partly legal, since out-patient clinics are only established for the pre- and after-care of in-patients, not solely in the field of planned parenthood.

As family planning training facilities have hitherto been demonstrably insufficient, university clinics and other teaching hospitals have taken a special initiative in this field. An attempt was made to contact practising physicians who had had no opportunity of family planning training, for whom meetings, with the possibility of extended discussion, were arranged. Family planning is frequently included in gynaecological scientific meetings. In addition, applications from physicians seeking family planning training are continually being received in the advice centres, particularly in Vienna. In private medical practice, women

increasingly request a prescription for oral or other contraception, so obliging physicians to come to terms with family planning, and study the subject, often leading to contact with teaching hospitals, where all physicians may obtain the necessary information.

In future, we envisage the responsibility of university clinics and teaching hospitals in family planning as follows. Undergraduates should, through different teaching institutions and practical activities, obtain a good basic knowledge of family planning which will enable them, as postgraduates, to take certain decisions without further qualifications, or at least to recognise the need for specialist consultation, and to be informed of the existing possibilities. General physicians and specialists should be trained theoretically in family planning in university clinics and teaching hospitals, and be able to gain practical experience in special advice centres. The necessary facilities already exist. We propose that family planning advice centres, in university clinics and district hospitals, should function as training centres, and referral centres for problem cases.

In university clinics, a multidisciplinary approach to family planning is adopted. Contraception remains prominent. To this will be added psycho-social treatment, psychiatric care and eugenic advice. The personnel in the centre include a gynaecologist, and interdisciplinary associate professions. An important role falls to the psychologist, the psychiatrist and the social worker. Why the gynaecologist should bear the main responsibility is easy to understand: he is the best informed on reproductive physiology; he possesses the endocrinological knowledge necessary for prescribing hormonal preparations; and he can perform operations and treat any complications arising. The social worker is only involved optionally, and in accordance with practical possibilities.

In university clinics and district hospitals, beds are available for operations on patients referred from family planning advice centres. Anyone visiting an advice centre has the entire range of diagnostic and therapeutic hospital equipment available, should the necessity arise.

Clinical advice centres, in addition to treating those seeking advice, permit the scientific testing of methods of fertility regulation, as well as trials of new contraceptives.

H Husslein
Österreichische Gesellschaft für
Familienplanung

Belgium

This note is intended to give a general idea of the role and practice of planned parenthood in one university medical centre, although there are only minor differences between the different university hospitals.

The introduction of planned parenthood into departmental policy, and the attainment of national uniformity in thinking and application, are recent, and due mainly to the coincidence that present-day chairmen of most departments of obstetrics and gynaecology regard planned parenthood as socially indispensable. Unlike those physicians who remain unaware of, or are unprepared or unwilling to accept this responsibility, these men have gone to great pains to integrate the principles and practice of family planning into their respective departments. The receptiveness of staff members and students to this philosophy, and the response of patients, have made the innovator's task both productive and extremely interesting. In obtaining the active participation of other departments, they have been only partially successful, as is suggested by the occasional dramatic situation (e.g. pregnancy in a patient with a cardiac valve prosthesis, or a recent organ transplant; and with women conceiving during a period of irradiation therapy, or while on ovotoxic drugs), iatrogenic situations which could have been prevented by timely thinking by the physician. Other problems of planned parenthood services, and those requiring changes in the attitude and practice of those who provide them, will be pointed out below.

Because all modern contraceptives are available, restrictive legislation does not constitute either the main, or the fundamental obstacle to family planning. Nevertheless, in view of the deep-rooted psychological resistance, in matters of sexuality and planned parenthood, of the 'establishment'

(including a high proportion of the service-providers, such as physicians and pharmacists), removal of the legal roadblock is urgently needed. Such measures will, by easing consciences and relaxing minds, favourably affect attitudes to planned parenthood, in both the provider and the acceptor. However, the removal of legal barriers, and the provision of knowledge and education, in matters of contraception is but a tiny part of the broad process of learning about human sexuality and family life. Therefore, it is imperative that the education and training of both providers and users be not limited to technical know-how, but that they be expanded to include the all-important psychological, socio-economic, and health aspects and implications of sexuality.

In this context, the main task of the medical teacher is to implant and integrate the philosophy and practice of planned parenthood in the university hospital. This has taken time to achieve in Ghent, but the knowledge that the field has hardly been touched, and that so much remains to be done, has not made us unduly pessimistic because, after all, evolution has been spectacular, as the following developments indicate. In 1949, the author (then a final year student) chose to give a lecture on contraception, as one of the requirements of his internship in obstetrics; the subject, reluctantly accepted by the chairman, was discussed behind closed doors. Fourteen years later, for the first time in the history of this medical school, the same subject-matter was officially included in the medical curriculum, and has since been adapted in other paramedical (School of Nursing) and nonmedical (Faculty of Pharmacy) departments. In 1968, an outpatient clinic devoted to contraception, and so named, opened in our Department; while a few years later, an interdisciplinary project on sterilisation was launched (Thiery *et al*, 1973).

Teaching and Practical Training

The theory and practice of family planning must be transmitted to the providers, a heterogeneous group, including the medical profession, paramedical personnel (nurses, midwives, etc.), and nonmedical personnel (pharmacists, psychologists, counsellors, etc.). With the exception of pharmacists, the third group will not be discussed here, mainly because its members are trained outside the teaching hospital.

Since the role of the various groups in transmitting knowledge to users is divergent, each must be approached differently. Here, the greatest practical difficulty stems from the generation gap in each category. Whereas curricular teaching and training present few difficulties, it is a really formidable problem to reach postgraduates for periodic refresher courses, or to give initial instruction to those who, due to their age, have never had any teaching or training in these matters.

1 The Medical Profession

Three levels of instruction must be considered separately:—

1.1 The Medical Student

For the last ten years, formal planned parenthood teaching has been included in the postgraduate students' curriculum. The second year of the postgraduate course in obstetrics includes lectures on theoretical aspects, supplemented by visual aids, and discussions on problem-solving with small groups of students. For this level, a textbook on contraception has been published (Thiery *et al*, 1971). Since our contraception clinic was established, students have been brought into contact with patients during their final year internship.

The present situation is not ideal. In the curriculum, human reproduction is scattered over various courses (e.g. in physiology, endocrinology, social medicine, genetics, obstetrics and gynaecology) and the teaching probably comes too late. Because of the fundamental importance of the subject, and in agreement with the present-day trend towards integrating subject matter, the various facets of human reproduction should be taught in a separate course, either at a late undergraduate or early postgraduate level (Hubinont, 1967). This course in turn would form an introduction to obstetrics and gynaecology, which could consequently be lightened, to concentrate on medical and technical aspects of contraception. The opinion of gynaecological university teachers is unanimous here, and several Belgian universities have recently adopted this policy. The present overcrowding in medical schools, and the type of patient the student has to deal with, seriously impede the expansion of clinical teaching on fertility regulation, and

explain why practice inevitably lags behind the transmission of theoretical knowledge.

1.2 The Postgraduate Student

Throughout the four to six years of postgraduate training, the would-be gynaecologist is offered a full range of opportunities to acquaint himself with all theoretical and practical aspects of planned parenthood.

1.3 The Practising Physician

No adequate solution to the problem of teaching and training (or retraining) the practising physician, both the general practitioner and the specialist, has been found so far, and the practical results of periodic lecture courses organised by our staff, and sponsored by the Flemish Society of General Practitioners, and by the Flemish Society of Gynaecologists, have not been encouraging. We therefore believe that the problem of postgraduate education, shared by general and specialised medicine, calls for a well-defined and integrated policy.

2 The Paramedical Professions

The sociocultural background of paramedical personnel explains a traditional resistance to family planning, which is still acutely felt. Because the success of planned parenthood services depends largely on their active and positive participation, a drastic and well-timed change of attitude of instructors, student-nurses and qualified nurses is urgently needed. Having them work alongside physicians committed to planned parenthood has proved immensely effective. Curricular changes (see 1.1), and the inclusion of these topics in official postgraduate education, are also needed. As yet however, little has been accomplished, and we feel that those responsible are simply waiting for official bodies to take a definite stand.

3 The Nonmedical Professions

Impending legal changes will probably place the pharmacist in a central position in providing contraceptives. Consequently, if the pharmacist's specific knowledge and skills are to serve the community, his traditional resistance will need to change. Modification of the ethical code of this nonmedical group may contribute to this end. The problems of transmitting theoretical and practical knowledge to the pharmacist, and the student of pharmacy, will also need to be coped with. Lately, our Faculty of Pharmacy has introduced postgraduate lectures on contraceptives, covering specific and clinical aspects.

Services

The most important new accomplishments of the teaching hospitals lie in the provision of planned parenthood services.

Aware of the unique educational opportunity in the group of pregnant women, over 80% supervised by physicians, most deliveries occurring in hospital, our department has concentrated on this particular group. Family planning is discussed by the physician-in-charge with any woman attending the prenatal outpatient clinic, and an illustrated booklet on the subject offered without charge. The women are also invited to attend (preferably accompanied by their partner) a series of prenatal classes, during which fertility regulation is discussed. After delivery (on average, our patients stay in hospital 6 days), groups discuss all aspects of maternal and child health, including family planning.

Due to the increased work-load involved, the enthusiasm of physicians in charge of these discussions has cooled. We therefore plan to replace the classes by programmed audiovisual courses. The final choice of contraceptive method is made by the partners at an early postpartum check-up (third to fourth week), and the desired information given. If either partner chooses sterilisation, the couple is evaluated, after preliminary discussion by medical staff, by trained psychologists (Thiery *et al*, 1973).

Nonpregnant women are encouraged to attend the contraception clinic, regardless of age, marital status, or residence. This type of service has been a success, as shown by the steadily increasing attendance of women referred by colleagues working inside or outside the hospital. The number of cases with medical, psychological, sexual, or social problems is also growing. The same success is encountered in our postpartum family planning (including sterilisation) programmes, which occasionally send an unbooked patient to our maternity section, to benefit from the facilities routinely offered to our own patients.

References

Hubinont, P O (1967): The role of university teachers in transmitting knowledge: *Preventive Medicine and Family Planning*, 199–201: IPPF Europe Region, London.

Thiery, M, Buysse, G & Haspels, A A (1971): *Anticonceptie*. Stafleu's Wetenschappelijke Uitgeversmaatschappij NV, Leiden.

Thiery, M, Cliquet, R L, Wauters, M & van Maele, C A (1973): A prospective investigation of voluntary sterilisation: Second Int. Cong. Voluntary Sterilisation, Geneva (*in press*).

M Thiery
Ghent University

Contraception and the NHS in Britain

In the House of Commons, on 12 December 1972, the Secretary of State for Social Services announced expanded National Health Service (NHS) family planning advice services, to be made available free-of-charge to all who desired them, extra funds for public information services and professional training courses, and free contraceptives for those in social and financial need, and for all women within one year of abortion or delivery. People in medical need would only pay a prescription charge (£0.20 per item) for contraceptives, while others would pay the full cost. The new arrangements would be implemented as soon as possible.

In April 1974, family planning services will become the responsibility of new NHS authorities. In a Committee of the House of Lords on 19 December 1972, the NHS Reorganisation Bill, Clause 4 (Family planning service), was under discussion. Against Government advice, the Lords decided, by 76 votes to 51, to amend Clause 4, to read: "It shall be the duty of the Secretary of State to make arrangements to such extent as he considers necessary to meet all reasonable requirements in England and Wales for the giving of advice on contraception, the medical examination of persons seeking advice on contraception, the treatment of such persons and the supply of contraceptive substances and appliances; and such arrangements shall provide that no charge shall be made for any such medical examination or treatment or for the supply of any such substances or appliances".

In the House of Commons on 26 March 1973, the Secretary of State for Social Services moved the Second Reading of the NHS Reorganisation Bill. The Government had decided to modify their original proposals so that, instead of most people bearing the full cost of their contraceptives, these would be placed on the same basis as other NHS drugs and appliances, the patient paying no more than the prescription charge, with the normal exemptions, from 1 April 1974. The Secretary of State defended the retention of the prescription charge on financial grounds, and to avoid the anomaly of contraceptives free-of-charge while prescription charges remained on life-saving drugs, for example. He explained that physicians would be authorised to prescribe all contraceptives, including condoms, although he believed that most men would continue to buy their condoms commercially.

(In a statement on 26 March, the Family Planning Association said: "The suggestion that prescription charges should be paid for contraceptives should be resisted. Prescription charges were introduced to limit the consumption of medicines and appliances. It would be nonsense for the Government to want to limit the use of contraceptives".)

In the House of Commons Committee Stage on 17 April 1973, the NHS Reorganisation Bill, Clause 4, was discussed further. The Under-Secretary of State for Health and Social Security stated that the provisional number of legal abortions performed on women resident in England and Wales in 1972 was 108 582, i.e. 15 per 100 live births. (The provisional number of illegitimate births was 63 173). Including unwanted conceptions in married women, the Under-Secretary estimated "probably about 250 000 unwanted pregnancies in any given year" (about a quarter of all pregnancies). The Government sought to amend the Lords' amendment. The Committee decided, by 12 votes to 11, to do so: ". . . and it is hereby declared that the power conferred by section 1(1) of the National Health Service Act 1952 to provide for the making and recovery of charges includes power to provide for the making and recovery of charges for the supply of any such substances or appliances".

During the House of Commons debate on 26 March, several Members of Parliament had mentioned the *Report of the Population Panel*, published on 22 March 1973. In May 1971, a report of the House of Commons Select Committee on Science and Technology on *Population of the United Kingdom* had concluded: "The Government must act to prevent the consequences of population growth becoming intolerable for the every day conditions of life". In November 1971, a Population Panel was appointed, "to assess the available evidence about the significance of population growth for both public affairs and private life in this country at present and in prospect: to make recommendations about further work required, and how it should be conducted: and to report within one year".

Accordingly, the Population Panel submitted its Conclusions and Recommendations in November 1972, published with a more detailed analysis in March 1973. The *Report* devoted much space (about one eighth part) to

family planning "in order to set out the facts that led us to our recommendation".

The Panel recommended: "The first positive step towards a population policy should be the development of comprehensive family planning services as an integral part of the National Health Service, so that everyone knows of their existence and is free to use them".

In discussing the extension of family planning services, the Panel defined an unplanned pregnancy "as one which takes place when the woman has no wish to conceive", although not all such pregnancies led to unwanted births. The Panel confessed: "We have no way of determining the number of unwanted pregnancies"; but accepted that there were a significant number of unwanted births, which would be avoided "given 100% effective contraception applied in every case".

The Panel conceded: "The effect on the birth rate of developing comprehensive contraceptive services cannot be estimated with any precision"; and that "There is insufficient evidence on which to judge the effect on the birth rate of choosing to make all supplies either freely available or on NHS prescription in addition to making advice, etc. freely and comprehensively available". However, "Family planning is at present regarded as something outside general health care . . . anything which made people regard birth control as a normal part of medical advice might encourage couples to seek advice who had not already done so. This should improve contraceptive efficiency among all groups in the population".

The Panel speculated that a universally free service might influence attitudes to family formation. "The level of what is 'wanted' is undoubtedly related, in however complex a way, to the certainty or ease with which the 'wanted' can be achieved".

In its Recommendations, the Panel claims: "Adequate knowledge of reliable methods of contraception and access to such methods would result in many parents having smaller families . . . if there were an extension of family planning services as we suggest reliance on abortion would be further diminished".

In one widely quoted paragraph, the Population Panel recommended: "Policy in regard to family planning services should take account of population implications instead of

being decided, as at present, entirely in terms of its effects on health and social welfare".

On the other hand, the Panel would not advocate "measures involving any element of compulsion [implying] interference with individual liberty and family life which would in present circumstances be politically, socially and morally repugnant".

In their Recommendations, the Population Panel appealed to public opinion, scrutiny of which may afford some notion of the atmosphere prevailing in Britain. In January and December 1972, a representative sample of electors were interviewed on the subjects of population and birth control.

Of the January 1972 sample, 37% were able to quote the size of Britain's population, another 32% believing that it was up to 30 million, or at least 80 million; the remaining 31% did not know. Respondents were then informed that the correct answer was about 50 million, and asked whether this was about right, too small or too large: 54% considered it too large, 39% about right.

The sample were neither asked nor told the rate of Britain's population growth, but were asked to assess its seriousness. 84% felt that British population growth was a problem, including 57% who considered it serious or very serious. 64% thought that the Government should try to slow down Britain's population growth.

Finally, if the Government decided to encourage smaller families, 64% felt that it should provide a complete national birth control service; 48% that it should give tax benefits in the future for small families; and 54% that it should finance a national education and publicity campaign on birth control.

Of the December 1972 sample, 87% felt that British population growth was a problem, including 66% who considered it serious or very serious. 71% thought that the Government should try to slow down Britain's population growth; 64% that it should provide a free birth control service; and 60% that it should finance a national education and publicity campaign for birth control.

It is an intriguing question to determine exactly how "policy in regard to family planning services" could in practice "take account of population implications instead of . . . its effect on health and social welfare".

Condom Testing: Part 1

Anyone who has ever seen a packet of condoms will have noticed the claim: "electronically tested". What does it mean? At some stage or other, all reputable condoms will have been subjected to *electronic testing*, which seeks to detect holes and thin patches in condoms (which are rejected; although what becomes of rejects may be anyone's guess!) by assessing their ability to resist the passage of electricity. Such 100% testing is not infallible; besides, the manufacturer is anxious not to reject too large a proportion of his production: consequently, the acceptance level is arbitrarily fixed in practice.

The necessity for some form of objective evaluation of the efficiency of electronic testing is therefore manifest, and is typically conducted on a sample basis.

Test for Holes

A primitive and cumbrous technique for detecting holes in condoms, perpetuated in the 1960 Israeli Standard, involves air inflation to a certain diameter, with a requirement that, within a certain lapse of time (e.g. 15 min), no more than a certain, relatively small deflation shall be observed. Nowadays, nearly all condom standards prescribe filling the suspended condom with 300 ml of water, and inspecting for leakage.

The stringency with which holes are subsequently detected ranges from visual examination for small drops, a trickle, or even a jet of water, to rolling the water-filled condom, under light but firm manual pressure, over absorbent paper, which is examined for wet patches: the most severe and (what is more important) the most *reproducible* of all known techniques.

However stringent the various techniques for detecting holes, most condom standards seek to reject batches of condoms containing materially more than 1% defective items, which may be accomplished, with varying degrees of statistical confidence, depending on the requirement: in particular, the *number* of samples examined, rather than their proportion (rarely exceeding 1%) of the whole.

The objectives of sample testing are to *maximise* the chance of accepting *very good* batches of condoms (say, less than 0.25% defective), and to *minimise*

Stop press

In London on 17 May 1973, the annual conference of local medical committees agreed that family physicians would provide contraceptive services from 1974, subject to any conscientious objection, and without any obligation to prescribe contraceptives not requiring medical supervision: condoms in particular.

the chance of accepting *very bad* batches (say, more than 5% defective). For example, if we test 300 condoms, and allow not more than 4 defectives (as in the 1959 Swedish Standard), there is a 99.9% chance of accepting a 0.25% defective batch, and of rejecting a 5% defective batch: a sound scheme. On the other hand, if we test 5 condoms, and allow 0 defectives (as in the Israeli Standard), there is a 98.8% chance of accepting a 0.25% defective batch, and a 77.4% chance of accepting a 5% defective batch: a thoroughly unsatisfactory scheme!

Both the foregoing illustrate *single sample* schemes. Evidently, in the case of the sample of 300 condoms, permitting no more than 4 defectives, if as many as 4 defectives are already detected in the first 100 condoms tested, it is unlikely that we will find 0 defectives in the last 200, and hence accept the batch. Conversely, if we find 0 defectives in the first 200 condoms tested, it is unlikely that we will find 5 or more defectives in the last 100, and hence reject the batch. This is the idea behind *sequential* (multiple) *sample* schemes, in which the sample size depends on the testing results.

For example, from each batch, 100 condoms are first tested for holes: if there are 4 or more defectives, the batch is rejected at once. However, the batch cannot be accepted on the basis of testing only 100 condoms, as a 5% defective batch has a 0.6% chance of yielding 0 out of 100 defectives. If there are 3 or less defectives, then a further 100 condoms are tested. If there are 5 or more defectives in the first 200, then the batch is rejected. If there are 0 defectives in the first 200, then the batch is accepted: a 5% defective batch has less than a 0.01% chance of behaving thus; while a 0.25% batch will yield 0/200 defectives more often than not (in the long run, in 60.6% of such cases). If there are 1, 2, 3 or 4 defectives in the first 200, then a further 100 condoms are tested: if there are 5 or more defectives in the 300 tested, the batch is rejected; and if there are 4 or less defectives, the batch is accepted.

This last stage is identical with the single sample scheme cited. It happens that this sequential sample scheme has practically the same chance (99.9%) of accepting a 0.25% defective batch, and of rejecting a 5% defective batch, as the single sample scheme. Moreover, in the

sequential sample scheme, the mean sample size to arrive at a decision on a 0.25% defective batch is 239 condoms, and on a 5% defective batch, only 128 condoms. Rather more often than not, only 100 samples suffice to condemn a bad batch.

Notice that, in the sequential sample scheme described above, it was necessary to allow up to 3 defectives, out of 100 condoms tested, to ensure that good batches were not rejected. This takes account of the statistical fact that, if the *actual* proportion of defectives in a batch is p (of the order of 0.01, i.e. 1%), and N items are tested, the *observed* number of defectives is unlikely (about once in 1000) to exceed $Np + 3\sqrt{Np}$, which allows for statistical fluctuation yielding an unrepresentative sample. For example, if each of a series of batches were 0.75% defective (still good batches), to be sure of accepting nearly all of them, we would need to tolerate up to 3 defectives out of 100 condoms sampled from each, although in the long run we would expect rather less than 1 out of 100 defective on average.

This is the principle of *cumulative sample* schemes, exemplified by the 1964 and 1972 (revised) British Standards. In 1964, it was considered feasible to achieve a long-term proportion of defective condoms of *one per cent*. Accordingly, the cumulative formula allowed $0.01N + 3\sqrt{0.01N}$ defectives, where N = the cumulative sample size. At least 100 condoms were to be sampled from each quantum of 10 000 condoms (the fact that this represented a 1% sample was merely coincidental), and tested for holes: up to 4 defectives were tolerated. In addition, each quantum was accepted on condition that the *cumulative* total number of defectives did not exceed that prescribed by the formula, thus: 4/100, 6/200, 8/300, . . . , 19/1000, . . . , 130/10 000, . . . , and 1094/100 000.

It will be seen that the *cumulative proportion* defective approached 1% more and more closely as the cumulative sample size increased, thus: 4.0% ($N = 100$), 3.0% ($N = 200$), 2.7% ($N = 300$), . . . , 1.9% ($N = 1000$), . . . , 1.3% ($N = 10 000$), . . . , and 1.1% ($N = 100 000$). Although the occasional quantum might be rejected on the basis of 5 or more defectives out of 100 condoms tested, the cumulative limit was only likely to be exceeded if the

cumulative proportion defective exceeded 1%.

Cumulation therefore focuses on the *overall* defectiveness of a given brand of condom, rather than on the defectiveness of a particular batch. Indeed, it answers directly the consumer's question: what is the chance of *this* condom being defective? After all, the consumer obtains a condom from a retail outlet, not from any specific batch. The fact that, at some stage in its history, the condom formed part of a batch from which 300 condoms yielded up to 4 defectives only affords the consumer the assurance that the chance of his condom being defective lies somewhere below 5%.

Moreover, the *actual* defectiveness of even a given brand is bound to fluctuate from quantum to quantum, so that, in the end, only the *cumulative* defectiveness of that brand remains meaningful. In 1972, the British Standard's cumulative tolerance for defective condoms was lowered from 1% to 0.5%. (Actually, the stringency was even further increased by changing from a detection technique approximating visual inspection to one involving rolling the water-filled condom over absorbent paper). However, the new formula was not the expected $0.005N + 3\sqrt{0.005N}$ (which allows 2/100, and 567/100 000 = 0.6% defective), but $0.004N + 5\sqrt{0.004N}$ (which allows 3/100, and 500/100 000 = 0.5% defective).

In principle, this represents a 0.4% cumulative tolerance but, for practical reasons, it is convenient to resume cumulation from the beginning after $N = 100 000$ (1000 quanta, or 10 000 000 condoms), at which point the cumulative tolerance is exactly 0.5%.

Which is the highest standard?

Manufacturers will strive to submit for testing only batches of condoms with at least a 95% chance of being accepted (acceptable quality level, AQL). In other words, even batch standards have a cumulative impact, quite apart from the possibility (difficult in practice) of cumulating the test results of successive batches of identical condom brands.

For example, the Swedish Standard AQL = 0.7%; and the Israeli Standard AQL = 1.0%. However, the Swedish Standard has a 50% chance of accepting

(indifferent quality level, IQL) 1.6% defective batches; whereas the Israeli Standard IQL = 12.9%! One USA Standard, which prescribes a range of single and sequential sample schemes, depending on the batch size, has AQLs ranging from 0.2% to 0.5%.

Of the nationally applicable standards, the British, the Swedish and the USA standards are effectively of comparable stringency. The apparently greater stringency of the USA standards, which has been criticised as obliging manufacturers to produce relatively thick condoms, is reduced by only taking account of holes detected, for example, within 14 cm of the closed end (excluding any teat) in the Food and Drug Administration standard. About half of all holes detected are between 14 cm from the closed end and 2.5 cm from the rim. (The area within 2.5 cm of the rim is excluded from consideration in the Swedish and British Standards: explicitly in the former, implicitly in the latter).

Why test for holes at all?

It might be argued that 100% electronic testing, which aims to eliminate at least condoms with visible holes, offers sufficient assurance to the consumer, without any necessity for the extreme stringency of standards allowing less than about 0.5% of condoms with holes, detected by rolling water-filled samples over absorbent paper. It has been cogently suggested that the number of spermatozoa (or of organisms causing sexually transmitted diseases, for that matter) likely to escape through such holes in practice is far too small to induce conception (or infection), so that condoms with small holes are at least 99.9% as effective contraceptives (or prophylactics) as condoms without such holes.

Thus wearing *any* condom is practically as effective as wearing a condom free from such small defects. Interest then shifts to the questions of preventing more serious defects (e.g. a propensity to burst during coitus, a subject to be discussed in the next article); and, equally important, of promoting the use of condoms, where conception is not desired, and other methods of contraception are unacceptable. For it is believed that the major source of pregnancy, even in clinical trials seeking to assess the effectiveness of the condom, is simply *non-use*!

What makes a condom pleasant to use? Some would reply: impossible! it interrupts foreplay; it dulls (male) sensation; the whole process is grossly unnatural. Well, of course, choice of contraceptive method is largely a subjective matter, and for that (perhaps surprising) majority of contraceptors who prefer the condom, the question remains: how to render a duty as pleasant as possible?

Some of the nicest condoms in the world are made in Japan, a country with one of the highest proportions of current users of condoms in the world: about 40% of women aged 15–44 years, comparable to Sweden, and substantially more than Britain (about 30% of women aged 15–44 years). In Japan (and to a lesser extent in Sweden), the commercial promotion of condoms is intensive. In Japan are to be found some of the *thinnest* condoms in the world.

Curiously enough, the Japanese Standard does not prescribe condom thickness; nor does it prescribe freedom from holes in any sense comparable to the British, Swedish or USA standards. To be sure, the Japanese Standard prescribes a test for holes, apparently tolerating no defectives; but the technique is an electrical one, and may be less discriminating than electronic testing. It involves filling the condom with 1% saline, immersing in 1% saline, and measuring the electrical resistance between the inside and the outside of the condom, which must exceed a certain value.

The hypothesis is advanced that, the thinner the condom, the more acceptable in use. However, the thinner the condom, the greater the probability of holes before electronic testing and, to a limited extent, after electronic testing. Evidently, there is a limit on how thin a condom can be made, imposed by the necessity for basic structural integrity.

So the dilemma remains: how to reconcile acceptably thin condoms, from the consumer's point of view, with an acceptable proportion of defectives, from the tester's point of view. It is simply impossible to make disposable condoms completely free from holes. Hence the fundamental questions: what (maximum) proportion of holes, detected within 14 cm of the closed end (which seems more rational than considering holes

beyond 2.5 cm from the rim), should be tolerated? and what (maximum) thickness should be tolerated?

The minimum justification for "objective" testing for holes has already been mentioned: as a tool to evaluate the efficiency of electronic testing. That is, to measure the proportion of defectives remaining, as a result of both failing to detect them electronically, *and* failing to separate them adequately from accepted condoms. (Strictly speaking, even electronic test *rejects* have been "electronically tested"!).

It could also be argued that, although there is no evidence that condoms conforming to different standards, or even to none at all, differ in their contraceptive/prophylactic effectiveness, nonetheless there remains an irrational fear of "pinholes", implying that brands of condoms with few holes, even if demonstrable only in the laboratory, will be more likely to impress the potential user than those with many holes. More important still, the relative rarity of defects may persuade those who remain unconvinced that the condom *in practice* is one of the most effective contraceptives. Thus the condom probably has the highest continuation rate of any method of contraception.

IPPF Working Group on Condoms

In London on 27–28 April 1972, a meeting of an IPPF Working Group on Condoms brought together experts from Britain, Denmark, India, Japan, Sweden and the USA, to discuss the prospect of an international condom standard. The proceedings were circulated to the IPPF Central Medical Committee, which accepted them unanimously at their Tenth Meeting, held in London on 2–4 April 1973, and agreed that they should be made available to the International Organisation for Standardisation (ISO) when considering international standards on contraceptives. Copies were circulated to the Regional Medical Committee and member-associations in the Region in May 1973. Further copies are available from the Regional Office, 64 Sloane Street, London SW1X 9SJ, price £0.25 *plus postage*.

Philip Kestelman
Secretary to the
Regional Medical Committee

2nd Youth Journalists Seminar

Following the first seminar for Youth Journalists held in Dublin, and reported on in the March issue of the *Regional Information Bulletin*, a second seminar for German-speaking journalists was held in Ljubljana, 23–26 April. The seminar, organised in co-operation with the Federal Council for Family Planning and the Slovenian Committee of that body, attracted radio, TV and magazine journalists from Austria, the German Federal Republic, Poland and Yugoslavia.

The seminar was opened by Dr Jürgen Heinrichs in his capacity as a member of the Regional Information and Education Executive Committee. Dr Heinrichs said that the object of the seminar was to try to reach journalists, and through them young people. The tradition, ways of working and image of the member associations in Europe appears often to hinder their approaches to young people, in spite of goodwill. The Europe Region would endeavour through an exchange of experiences to promote this contact. Dr Heinrichs hoped that discussion with professional communicators having an audience/readership of young people would elucidate some of the problems to be overcome in communicating planned parenthood information. One of the underlying purposes of the seminar was to try and determine whether what the European planned parenthood associations have to offer is relevant to the needs of young people today.

The Associations are trying to help people to avoid problems that arise in the realm of human sexuality where such problems are avoidable. This is no easy task. Some of the problems take the form of oppressive anxieties, e.g. fear of unwanted pregnancy, of impotence, anxiety as to how to approach a sexual partner, fear of disappointment, expectations in sexual performance, fear of infertility, and finally, increasing fear of venereal disease. Clearly young people are not free from such fears. It is particularly difficult for them to find advice and help, and nowadays sexuality is generally portrayed as being without problems.

To whom should young people express their difficulties when they cannot even admit these to themselves? The solution appears to be in individual discussion, and the question arises as to whether the planned parenthood associations have anything to offer to young people in this area of advice-giving.

A number of obstacles have to be recognised and overcome in order to make customary methods of advice-giving attractive to the majority of young people. The present methods assume a certain ability in those seeking advice: awareness of the problem, willingness

to be helped, ability to express themselves, mobility, willingness to individualise questions – factors which do not apply for a large number of young people. Dr Heinrichs suggested that in attempting to arrive at solutions to these problems participants should bear in mind the goodwill, knowledge and counselling experience of planned parenthood associations, yet at the same time avoid solutions which would only apply to the more mobile and better educated members of society. Participants were also asked to review the potentialities, omissions and shortcomings of the media.

This introduction was followed by a paper from Dr Stanka Simoneti of the Maternal and Child Health Department of the Health Service of Slovenia. Speaking about the situation in Yugoslavia, Dr Simoneti traced the development of planned parenthood from the time when a regulation defining legal abortion was introduced in 1952, aimed at reducing illegal abortion. However, legalisation of abortion had not been considered a substitute for the promotion of contraception, which for a number of years has been included in the public health services, although the level of development of education and services varies in the different republics. In 1969, the Federal Parliament passed a resolution to the effect that planned parenthood was a human right and duty, emphasising the role of public health and welfare services.

For the past two years the number of abortions has stabilised. Through the Maternal and Child Health Services there is an increasing contact with women seeking planned parenthood services, but unfortunately this does not apply to the youngest group of women – those under 19. Ten years ago the proportion of abortion in this age group was 1%, now it is 2%. The number of women currently requesting planned parenthood advice for the first time is 8% in the age group up to 19, 55% from 20–29 and 31% 30–39.

A second paper, on the mass media and different possibilities for the sex education of young people, was presented by Mrs Jovita Podgornik of RTV Ljubljana, who had previously worked on the youth magazine *Mladina* in a team answering enquiries from readers sent in by letter or telephone. Mrs Podgornik believed that in Yugoslavia, as in other European countries, young people had an urgent need to discuss sexual matters, including planned parenthood. More sex education was necessary, but neither parents nor schools were prepared or qualified to provide this education. The mass media could play an important role, particularly in offering opportunities for discussion.

The two papers were followed by plenary discussion, allowing points of clarification and exchange of information on the different planned parenthood situations prevailing in the countries represented. For the remainder of the first day, the group stayed together to discuss areas in which members had expressed particular interest.

On the 2nd day two groups were formed, one consisting of radio/TV journalists, the other of magazine journalists.

The principal points which emerged from the reports presented on the last day were: that planned parenthood should be integrated in continuing social, educational etc. programmes for children, youth and the family, and not treated as a separate matter (although it was considered that there is still a need for occasional specific programmes, eg on scientific or political aspects) – the extent to which this approach can be implemented depends on the attitude of those with the authority to decide which programmes will be broadcast; that planned parenthood associations in Europe should take more active steps to keep journalists informed, particularly through seminars and discussions, and above all through personal contact; that the publishing media and radio/television should be mutually critical of each other's programmes; that programmes on sexuality and planned parenthood should not only inform but also educate – a great deal of responsibility and self-criticism needed to be exercised by those responsible for publishing articles and producing programmes to avoid indoctrinating propaganda, or the one-sided promotion of values.

During the seminar, participants visited the newly opened (March 1973) Family Planning Institute, which is attached to the University Hospital at Ljubljana, at which they had the opportunity of asking questions concerning the development of planned parenthood in Yugoslavia from Mrs Vida Tomsic, President of the Federal Council for Family Planning, and Professor Lidija Andolsek who is in charge of the Institute. Participants also visited a Youth Club where they were entertained by members.

Julian Heddy
Secretary to the Regional Information and Education Committee

International Planned Parenthood Federation,
Europe Region,
64 Sloane Street,
London SW1X 9SJ