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STUDIES ON FAMILY PLANNING

I.

**SURVEY TECHNIQUES IN FERTILITY
AND FAMILY PLANNING RESEARCH:
EXPERIENCE IN HUNGARY**

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Preface

Mankind shows an ever increasing interest in the problems of population growth which are closely connected and interrelated with the problems of socio-economic development. In this epoch of decreasing mortality it is fertility that arouses the greatest interest. Remaining at an almost unchanged high level or decreasing slowly in the greater part of the world, it has contributed to the very rapid and so far unprecedented increase in the history of mankind of the world population. In the developed countries, however, where fertility is already at a relatively low level, the main concern is very often to maintain a fertility level to ensure the reproduction desired.

In the economically developed countries it is the decision of the parents that basically determines the number of children and thus the family size. In these countries fertility will be realized, in general, within the framework of family planning through birth control. Under such circumstances the conventional methods of demographic measurement, i. e. vital statistics and the fertility data of population censuses are insufficient for the study of fertility.

To assess the present situation, to determine the tendencies of fertility and to evaluate its development in the future it is absolutely necessary to study ideas about the number of desired children, family plans, and the knowledge and attitude concerning birth control as well as the actual practice of fertility limitation. Studies of this type are even more necessary in the developing countries where in the absence of suitable statistics informations can only be obtained through the above studies.

The idea of special fertility and family planning studies first arose in the 1930's. Since then, especially from the beginning of the 1950's in both the

developed and developing countries, more and more studies of this type have been carried out. In Hungary, too, where special attention has long been devoted to the development of fertility - fertility studies have a long history.

In vital statistics, for instance, surveys and analyses concerning the fertility of married cohorts were performed as long ago as the 90's of the last century, while questions concerning fertility have appeared in the population censuses since 1920. The different trends of fertility in the last two decades and the rapid and significant changes in Hungary have justified the study of fertility from the viewpoint of traditional demographic statistics (vital statistics and the fertility data of population censuses) and also to reveal the factors influencing fertility.

This purpose was served by the following studies: the experimental TCS Study of 1958-1960, the one month special data collection concerning surgically aborting and child-bearing women in 1960 and 1964, the population census of 1960, the fertility survey of the microcensus of 1963, a longitudinal Marriage survey started in 1965 and, finally, the fertility and family planning study (TCS 66) of 1965-1966.

In the field of fertility and family planning studies information can be obtained with special difficulty since they relate to the very personal aspects of human life. The studies attempt to overcome this circumstance in different ways. The program of such studies are planned according to the different conditions of the individual countries and they also take into account the special demands arising from there. These differences, however, are often unjustified. Different principles are also applied to data processing and analysis as a result, of which the requirements of international comparability are often not met. Under such circumstances it was realized earlier that a minimum program of international standardization had to be drawn up, based on recent metodological experience. The fulfilment of this task started in 1961 within the framework of the International Union for the Scientific Study of Population at the suggestion of Hungarian demographers.

The Union set up the Committee on Comparative Studies of Fertility and Family Planning. The recommendations of the Committee were also put on the agenda of the 14th Session of the Population Comission of the United Nations in 1967 (Variables for Comparative Fertility Studies, E/CN.9/212.1967). It was very useful that a similar regional work, co-ordinated with former working programs,

also started within the framework of the International Planned Parenthood Federation Europe and Near East Regions and the question was also discussed at the first meeting of the Working Group on Social Demography organized by the Division of Social Affairs of the United Nations Office at Geneva. One of the objectives of the Hungarian TCS 66 Study was to contribute to the success of the international standardization program with its comparable data and experience.

In accordance with the above, the Demographic Research Institute set itself the task to review and publish the techniques and some experience of the Hungarian studies in a language accessible also to research workers in other countries. Besides the task of international standardization and improvement, the publication of the results has also been necessitated by the fact that often only the main findings of the above mentioned studies are published, and at that after considerable delay, and literature on the methods is relatively rather small.

Taking into account the above points the authors have collected and supplemented their formerly prepared material and papers which have so far only been published in Hungarian language and in different publications. Some details of Chapters 1-3 containing a description of the Hungarian fertility and family planning studies and some of their results were already published in Hungarian. Thus the data collection experience and the description of the questionnaire of the TCS Pilot Study was published as the "Main Results of the Hungarian TCS Study". The parts "Characteristics of the TCS 66 Study" and the "Selection of the Sample" are modified version of the paper which appeared in the second number of *Demográfia* in 1966 as well as in the Proceedings of the Fifth Conference of the Europe and Near East Region of the I. P. P. F. (Preventive Medicine and Family Planning). Similarly the questionnaire of the TCS 66 Study and an excerpt of the Instructions to interviewers have already been published in English. A rough description of the materials enumerated was published by the Population Council in its two volume publication "Selected Questionnaires on Knowledge, Attitudes and Practice of Family Planning". These above mentioned materials are now published in a somewhat modified form. Beside minor supplements the authors are also publishing the results of the computations on the errors of the sample data. The Chapter 4 is an abridged and modified version of Dr. Szabady's paper published in the second number of *Demográfia* in Hungarian in 1967 about the organizational experience and performance of the study. The Chapter 5 contains Dr. Acsádi's paper not so far published which deals with the methods of reconstruction of complete fertility history with special

regard to the unregistered terminations of conceptions, induced abortions and sterility. In spite of some illustrative data this volume is rather of a methodological character. The main results of the TCS 66 Study and further informations on the knowledge, attitude and practice of family planning in Hungary will be published in separate volumes.

The appendix to the publication contains the draft prepared by the I.P.P.F. Research Committee on Family Planning Trends as well as the relevant part of the Report of the Working Group on Social Demography. The volume is supplemented by a short bibliography of Hungarian fertility and family planning studies.

The authors would like to thank the 8,800 women who cooperated with the Demographic Research Institute in answering the questionnaires. Most of them understood the importance of the whole project and willingly gave correct replies to questions which were of a very personal nature. Without their contribution we could not perform the study. Thanks is also due to the nurses who conscientiously carried out the interviewing and produced work of high quality. The authors would also like to acknowledge the valuable assistance given by members of the Department of Population and Social Statistics of the Central Statistical Office who contributed to the organization of the survey and who processed and controlled the results. Particular mention must be made of Kálmán Tekse whose assistance was invaluable in designing the sample and Mrs. P. Horányi who contributed by training and controlling the interviewers. The Hungarian manuscript of this publication was translated by László Várady and revised by Paul A. Compton. Professor Péter Vég-helyi read the text from the medical point of view. The authors are very grateful to all three for their interest and valuable comments during the preparation of this publication.

Dr. Egon Szabady

CHAPTER 1

Hungarian Fertility and Family Planning Studies

1.1 General Survey

In Hungary, in the last ten years, four types of studies have been performed repeatedly in the field of family planning. The first was the so-called TCS study, the second a survey of a census character, the third a one-month collection of patient statistics on abortions, and the fourth a marriage survey.

The studies were performed in the following chronological order:

- 1958-1960 TCS study: a pilot study on fertility, family planning and birth control. See detailed description of the study under 1. 2.
- 1960 Census: fertility and family data.
- 1960 One-month collection of patient statistics on abortions, covering those patients who bore a child or had a surgical abortion in a hospital or in some other health institution during the course of October. It did not cover the total female population; e. g. women bearing their child at home or applying birth control with success or sterile women etc.
- 1963 Microcensus; fertility and family planning.
- 1964 One-month collection of patient statistics on abortions. Repetition of the abortion study of 1960; in April.
- 1965-1966 TCS 66 study: 0, 5 per cent sample of married women.
- 1966 Marriage survey: start of a longitudinal survey.

From among the above seven studies the population census studies differ essentially from the special studies about fertility and fertility planning. The programmes of the one-month collection of patient statistics and of the longitudinal marriage survey were similar to those of the TCS type studies, but they also had other aims. Thus in the following we wish to give a short description of the fertility, family planning and birth control studies of the TCS type, with special regard to their organization and survey techniques.

1.2 TCS Pilot Study

In 1957 a complex research programme on the problems of fertility, family planning and birth control was prepared up by the Hungarian Central Statistical Office. Since the Hungarian and international experience on such particular studies was incomplete at that time, the aim of the above-mentioned study was first and foremost, to prove the methods of data collection. The study of the problems of fertility, family planning and birth control, called the TCS study for short, started in the autumn of 1958 and ended at the beginning of 1960. The data collected relate to the period 1957 to 1959.

The survey was of an experimental nature, and its main purpose was to prove the methods of data collection. Since the problems of family planning and birth control are regarded, in general, as "delicate" questions of a "familiar" character, they can be studied better based on the "doctor-patient" relationship. 6,732 women were interviewed in all. 57 per cent of the cases were interviewed with regard to their delivery or abortion but the survey also covered women who contacted the health institutions for other reasons, from the point of view the randomness of the inquiry. Thus a 1/4 of the women interviewed had consulted a dispensary gynaecologist or had been treated at a gynaecological ward. Beside the possibilities offered by the health network, other means of collecting data were used, such as conferences, visits to families, pregnancy examinations, and reports to the abortion committee (which, however, covered only 1/5 of all the women interviewed).

Occasions of the inquiry	Number	Percentage	Of which	
	of the persons questioned		town dwellers	villagers
Deliveries in health institutions	1,893	28,1	540	1,353
Abortion in health institutions	1,950	29,0	752	1,198
Consultations with gynaecological specialists	1,401	20,8	586	815
Unknown occasions in gynaecological and obstetrical institutions	323	4,8	191	132
Patients treated in other wards of hospitals	172	2,6	129	43
Companies, plants	304	4,5	266	38
Visits of nurses to families	277	4,1	85	192
Pregnancy examinations	139	2,1	54	85
Reporting before AB committees	231	3,4	114	117
Other and unknown occasions	42	0,6	22	20
Total	6,732	100,0	2,739	3,993

In selecting the sample, efforts were made to apply the principles of sample surveys with regard to the stratification by area and random selection, but as regards age and social stratum, in certain groups overrepresentation was aimed at. Thus the TCS sample covered 0.27 per cent of the women aged 15-49 years, and withing them 0.44 per cent of those aged 15-39 years.

The principles applied in selecting the sample were as follows:

1. The principle of stratification by area. The data collectors were selected so as to obtain a proportionate sample from the different parts of the country with an approximately identical level of fertility, taking into account the differences between towns and villages and between industrial and agricultural regions.

2. The principle of random selection was implemented so that the data collectors interviewed unselected series, i.e. they questioned only those women with whom they got in touch during the time prescribed.

3. As regards age and social stratum in connection with some groups overrepresentation was aimed at in order to obtain a sample of a proper size of the

younger women of reproductive age as well as of smaller social strata revealing uncharacteristic features.

The pattern of the sample depended, first of all, on the possibilities of the inquiry. Although in many respects it gives a good characterization of the population's attitude toward birth control and family planning, it may also contain some biases, the size of which differs from the inevitable errors arising in representative samples. The data collected from health institutions represent a selected mass of women whose attitude differs greatly from those who did not contact health institutions. It can be presumed that among child-bearing and aborting women the number of those applying prevention with success is smaller than among the rest of the female population of corresponding age; and since the intervals between abortions may be shorter than between births, more aborting women can be included in the sample than the actual proportion of women applying birth control.

While it is probable that the selection of childbearing and aborting women has a biasing effect on the distributions relating to the attitude towards birth control - this is shown also by patient statistics for 1960 - the selection of women consulting with gynaecological specialists or treated in other wards of hospitals or questioned in companies, plants or at home does not contain this type of bias. With regard to the attitude towards birth control, about one third of the sample may be regarded as unbiased. In this respect the distributions of those who filled in the questionnaires in at pregnancy examinations are similar to the distributions of those questioned immediately after giving, birth, while the distributions of those reporting before AB committees are similar to the distributions of those questioned after having an abortion.

The different occasions of the inquiry do not lead, to the same size of bias regarding the different criteria. As regards the planned number of children, for instance, a selection of the childbearing and aborting women gives a much better approximation of this phenomenon than it does in connection with the general attitude towards birth control. With regard to the planned number of children it is probable that even more occasions of inquiry do not lead to bias; among women questioned at consultations of gynaecological specialists the number of sterile women may be greater than in the total population.

It should be stressed that due to overrepresentation, more young women of reproductive age were included in the sample than old women, and, similarly,

more urban occupational groups, particularly non-manual workers, than those engaged in rural occupations, particularly in agriculture. The utility of the sample data is not increased thereby, but it does call attention to the fact that in the results of a survey thus performed, only the group values and their comparison and not the summarized values are reliable. In the course of the analysis the bias can be eliminated through standardization after which the summarized data of the first and second surveys can be compared.

The secrecy of the individual data was ensured because of the confidential nature of the replies. Not only on the questionnaires but also on the instructions given to the interviewers the attention of the persons interested was drawn to the impersonal and statistical character of the data collection. A further basic principle of the inquiry was that when a person interviewed did not want to reply, the question was left unanswered. In spite of this there were relatively few incompletely answered; they figure in the tables in the row "unknown". In part they can be attributed to the low level of education of those who filled in the questionnaires.

Most questionnaires were completed by the persons charged with the data collection by the interview method. Interviewers were, as a rule, specialists (gynaecologists-obstetricians). In some places the interviews were performed by the middle ranks of the health organization (nurses, midwives) under the control of specialists.

The other method of questioning was self-enumeration. Of all such types, controlled self-enumeration was the most successful. In this case the data collectors explained, the aim of the questionnaire as a rule, to a group of women. They, then handed over the questionnaires for completion and told how the questions had to be answered correctly. When collecting the questionnaires the data collectors reviewed the answers and corrected those completed incorrectly or incompletely. There were also cases when the questionnaires distributed for completion were handed over by the woman to be interviewed to a more educated woman who, enjoying the confidence of the others, completed them, usually by the method of questioning.

The so-called correspondence method of self-enumeration was also applied. In this case the woman interviewed also received an addressed envelope enclosed with the questionnaire. The persons interviewed returned over the questionnaires in the envelope at an appointed place, to the person charged with data col-

lection, or by mail. A number of questionnaires were obtained in this way, but although this method ensured optimum secrecy there were many who did not answer or completed the questionnaires in a manner unfit for processing.

The fact that some persons selected are not included in the sample or refuse to answer (non-response) may also contribute to the sample bias. Since the programme of the TCS study was of a personal character and contained questions considered confidential, data were also collected concerning the women omitted or those who refused to answer, to obtain information on the possible resulting bias.

Thus the persons charged with the data collection in the health institutions were requested to keep separate records about those persons for whom no questionnaires were completed and for those who did not wish to answer, indicating their age, marital status and occupation. Reports on non-response, which could be evaluated also numerically, were gathered from 15 health institutions. The reports showed a very high response rate, which can be attributed in part to the confidence of the patients in the doctors. Though the doctors participating in the data collection were requested not to force replies as it might lead to false information and thus bias the sample. There were no refusals at all in five institutions. Generally, in those places where the study was well organized and the women were informed about the aim of the survey and where the doctors or interviewers enjoyed the confidence of the persons interviewed (in some cases intelligent midwives or patients who were informed about the study participated in the work) all the persons interviewed were willing to answer or only exceptionally refused to answer.

Summarizing the reports, out of 2,538 women interviewed only 58 (2.29 per cent) refused to answer. One third of the persons interviewed and who answered were under 20 years or over 40 years of age, mainly unmarried (31 per cent). There were among them many unmarried skilled workers, occasional workers (17 per cent), and executives as well as older married women engaged in agriculture (12 per cent).

When making interviews in health institutions not all persons treated in them during the collection of data were questioned - due to their short stay there, their grave condition, older age etc. Out of 2,878 women treated in the above-mentioned institutions 219 women, in addition to those who refused to answer, were not included in the sample, i. e. the rate of omission was 7.61 per cent. The composition by age, marital status and occupation of the persons omitted did not differ from that of the persons interviewed.

In several institutions where the questionnaires were handed over in an addressed envelope, the rate of the questionnaires sent back uncompleted or incorrectly completed and the rate of omissions, was significantly higher. In seven such institutions, for instance, where 1,000 questionnaires were handed over for completion, the number of those which were uncompleted or unfit for use was 189, i. e. 18.94 per cent of all the questionnaires distributed.

The lowest rate of questionnaire return was from questionnaires distributed during lectures giving information about family planning. Out of 300 such questionnaires only 113 were sent back; the rate of non-response was 62.33 per cent.

Non-response data from the whole sample, can be seen in the Table below. The number of omissions is estimated at 3,000, and the number of non-responses at 800.

Scope of data collection	Number of persons to be interviewed	Of which		
		omissions	non-responses	responses
Interview and controlled self-enumeration	2,878	161	58	2,659
Self-enumeration with envelope	998	-	189	809
Correspondence	300	-	187	113
Together	4,176	161	434	3,581
Estimated data of the total sample ^{a/}	7,800	300	800 ^{b/}	6,732

a/ The non-response and omission are rounded off. - b/ Of which about 400 persons refused to answer.

Different rates of non-response could be found with regard to the different methods of questioning. In case of proper information and personal inquiry, explicit refusals to answer occurred only exceptionally. Where the completion of the questionnaire was left to the person interviewed, the number of those who did not reply due to negligence or lower cultural level was higher. The worst experience was obtained from the correspondence method, where the rate of non-response was higher

than the rate of response. This was due presumably to the fact that for most women interested in the survey the completion of the 6 page questionnaire was too much work and trouble.

To summarize the experiences of the TCS study, the willingness of the women to reply to questions considered "delicate" can be regarded as satisfactory though individual interviews required a long time; it was almost 100 per cent where the persons participating in the data collection obtained the confidence of the persons interviewed and worked conscientiously. A comparison of the rates of non-response is given below:

refusals from the interview method	2.3 %
rate of omissions not influencing the sample	7.6 %
non-response from data collection with envelope	18.9 %
non-response from the correspond- ence method	62.3 %
estimated non-response from the whole sample	11.0 %

1.3 TCS Pilot Study Questionnaire

Fertility Case-Study

(A Questionnaire for married women and females over the age of 16 who voluntarily accept to answer the questions)

Dear Madam,

We presume that you are interested in the human and, from a social point of view, very significant questions of female fertility, family planning and birth control. If you would like to settle the difficulties, occurring in this field in your private life, or to contribute to the solution of these problems, please answer the questions of the present Questionnaire.

You need not and must not write your name on the Questionnaire. The data are impersonal, and serve exclusively for statistical purposes. The secrecy of your answers are thus ensured.

Should you, however, not want to answer a certain question, please, leave it blank rather than give a misleading one. On the last page of the Questionnaire, please make any comments you consider necessary in this matter.

The completed Questionnaire should be returned to the person from whom you received it, or sent direct to us by post, using the enclosed printed and pre-paid envelope.

Questions:

If there are words of reply
after the questions please,
underline the suitable ones.

1st Part

1. Usual residence (name of village or town) -----
2. Birthplace (name of village or town; if born abroad, state the country, too) --
If the residence is different from the birthplace, state the place where you
lived longest -----
If the residence is the same as the birthplace, were your parents or grand-
parents born at the same place? yes - no -----
If not, from which county (or which country) does the family originate?-----
3. Year of birth -----
4. Mother-tongue? Hungarian - Slovak - Rumanian - Southern Slav - German -
Gipsy - other
What other language/s/ can you speak? -----
Nationality? Hungarian - Slovak - Rumanian - Southern Slav - German - Gipsy -
other
5. How many of your brothers and sisters were borne (deceased children includ-
ed) by your mother? -----
Number of your mother's brothers and sisters (deceased children included)? --
6. Present occupation (please, give full particulars as to your occupation, your
schedule of work; farmers should state also area of landed property; if you
have no gainful occupation, indicate your situation e. g. family member, house -
keeper, student, etc.) -----
Employment status: independent - unpaid family worker - member of co-
operative - manual worker - non-manual worker - de-
pendant
7. Religion: Roman Catholic - Greek Catholic - Calvinist - Lutheran - Greek
Orthodox - Jewish - nonsectarian - other
8. Level of education (number of forms or grades completed): -----
can - cannot read and write

9. Occupation of parents: agricultural
non-agricultural: manual - non-manual
10. Marital status: single - married - living in consensual union -
widowed - divorced - de facto separated
If married, year of (first) marriage: -----
If your first marriage ceased, please specify the year/s/ of becoming widowed
or divorced, and the date of your remarriage: -----
11. Housing conditions: good - satisfactory - not satisfactory - bad
In what capacity do you or your husband live in the dwelling: owner - tenant -
co-tenant - sub-tenant - other, namely: -----
Number of living-rooms in your dwelling (section of flat): -----
Do you have a kitchen? -----
What other additional premises are there in the dwelling? -----
How many persons live in the dwelling (section of flat) altogether: -----
With which persons do you live in the dwelling (section of flat)?
With your husband - mother - father - mother - in-law - father-in-law- ...
child/ren/ - son-in-law - daughter-in-law- ... grandchild/ren/- other per-
sons, namely: -----
12. Do you suffer from a chronic disease, or have you any pathological abnormality?
How is your state of health? -----

2nd Part

If you are married, or live in consensual union with your mate, please, fill in the following headings as well, concerning your husband or mate (for questions 4/a, 6/a and 7/a give the reply by the same printed words as for the questions 4, 6 and 7).

- 1/a Usual residence of your husband: -----
2/a Birthplace: ----- 3/a Year of birth: -----
4/a Native language, nationality: -----
5/a Number of brothers and sisters: ----- Number of his mother's
brothers and sisters: -----
6/a Present occupation: -----
Employments status: ----- 7/a Religion: -----
8/a Highest level of education: -----

3rd Part

13. Please, specify in the following table the name, year of birth of your children born alive, and, if the child/ren/ died, his (her, their) age at death. On the second and third table indicate the year/s/ of your stillbirth/s/ and abortion/s/, as well as the sex of your stillborn child/ren/ and for the abortion/s/ your miscarried fetus/es/, and the duration of pregnancy.

Number	Live-born child/ren/			
	Year of birth	Christian name	Is the child living?	If the child died, how old was he (she)?
1				
2				
3				
4				
5				
6				
7				
8				
9				
10				

Number	Stillborn child/ren/	
	Birthyear	Sex
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		

Number	Abortion/s/	
	Year	Age of the fetus (months)
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		

14. Are you pregnant now? Yes - no -----
15. How old were you at your first menstruation? -----
 How old were you when menstruation definitively ceased? -----
16. At the time of your marriage did you think how many children you wanted to have altogether? Yes - no
 If yes, how many children did you want approximately? -----
17. Have you and your husband discussed the number of children? Yes - no
 If yes, did your husband: hold the same opinion as you - wanted less children - wanted more children
18. Did you change your mind about the number of children during the course of your married life? Yes - no
 If yes do you desire: more children - less children
19. In your present circumstances, how many children do you presume desirable (including the existing ones)? -----
20. Have you or your husband ever used any method of birth control? Yes - no
 If not, did you want or would you like to use a method? Yes - no
21. To be filled in only in case when neither you or your husband have ever done anything to avoid, prevent, interrupt or postpone pregnancy.

Why do you not consider the control of your confinements necessary?

- | | |
|---|--------------------------------------|
| 1. You want a large family | More than one answer
can be given |
| 2. You fear for your health | |
| 3. Because of ignorance of suitable methods | |
| 4. You do not care, or you trust in nature | |
| 5. Your husband does not want to practise contraception | |
| 6. For religious reasons | |
| 7. On account of your sterility | |
| 8. Because of the illness (impotency) of your husband | |
| 9. For other reasons, namely: ----- | |

Of all the above, which one do you consider the main reason? (Mark the number, please) -----

22. When did you or your husband practise a method to avoid, prevent or dis-continue pregnancy?

More than one answer
can be given

1. Before marriage
2. In the first years of married life only
3. Throughout the whole duration of married life
4. Only after you both considered the number of children sufficient
5. In general you both practised contraception but have not considered pregnancy an accident
6. Not regularly, sparsely

23. How do you try to avoid pregnancy?

More than one answer
can be given

1. By the safe period (rhythm or Ogino-Knaus) method
2. By interrupted (not finished) intercourse (coitus interruptus)
3. By total omission of intercourse (abstinence)
4. By the husband using condom (sheath)
5. By using pessary
6. By using a douche, with what? -----
7. By the "regulation" of menses, namely: -----
8. By using other methods, namely: Timidon tablets - contraceptive jellies - sponge - tampon - cervical cap - etc. e.g.: -----

Which of the methods (or devices) have you most frequently used? (Mark the number, please) -----

24. If you had any abortions, how often and what was the cause?

1. Spontaneous abortion (without intervention) in ----- cases, because of -----
2. Surgical abortion in ----- cases, because of -----
3. Other interruption of pregnancy in ----- cases, because of -----

25. Why do you (or did you) want to control the number of your confinements?

1. For your own physical health
2. Because your previous pregnancy or confinement was difficult
3. For fear of pregnancy or confinement
4. For the fear of miscarriage

More than one answer
can be given

5. For the fear that the child will not be normal
6. For your age
7. For financial or other economic difficulties
8. For your housing conditions
9. For undertaking a job
10. For the prolongation of the period between pregnancies
11. In order to keep your liberty
12. For the fear of the future of the child to be born
13. Your husband does not want any children
14. For interference with your parents, relatives
15. For habit (custom)
16. For your marital status
17. For the fear of being mocked that you cannot take care of yourself and have many children
18. With less children you think your life is more human
19. You find frequent pregnancies and confinements uncomfortable
20. For other reasons, namely: -----

Of all the above, which one do you consider the main reason?

(Mark the number, please) -----

26. Did birth control adversely effect your health? Yes - no. If yes, how and from which method? -----

4th Part

27. Please, state here below your opinion about birth control and your experience in this respect. Also include any individual questions that you have concerning fertility or birth control, and, if you consider it necessary, please indicate the circumstances or features that are not included in this Questionnaire.

In connection with which event was this Questionnaire filled in? -----

Date of completion; -----

1.4 Patient Statistics on Abortions and Births

The scope and content of the one month collection of patient statistics are briefly summarized below:

The data collection of the Central Statistical Office in October, 1960, and that of the Ministry of Health in April, 1964, covered those females who had been treated for induced and spontaneous abortion, extrauterine pregnancy and delivery in October, 1960, delivery, induced and spontaneous abortion in April, 1964. Patients in hospital maternity wards, in obstetrical clinics and in maternity homes were covered. Questionnaires were completed for 26,157 women in 1960 and for 27,915 women in 1964.

The population thus selected however, gave a distorted picture of pregnant women as it did not contain the data of women who delivered or aborted outside a hospital. The data, therefore only supplied information about on those obstetrical events which had taken place in sanitary institutions.

The questionnaire used for the data collection of 1960 was as follows:

Statistical Questionnaire

With the permission No. 446/1960/
E. M. of the Ministry of Health

1. / The events with regard to which the questionnaire was completed: delivery - induced abortions - spontaneous abortions
2. / Case-history number:
3. / Year of birth: 19 . . .

4. / Permanent residence: (village, town)
5. / Marital status: married - consensual cohabitation - legally divorced - living separately - widowed - single
6. / Year of last marriage (in case of married persons): 19 . . .
7. / Occupation of the person treated:
8. / Occupational status of the person treated: manual (worker) - non-manual (including white collar) - member of a co-operative - self-employed unpaid family help
9. / Year of birth of the husband (partner in life): 1 . . .
10. / Occupational data of the husband (partner in life) (supporter in case of unmarried dependants)
 - Occupation
 - Occupational status: manual (worker) - non-manual (clerks too) - number of a co-operative - self-employed - unpaid family help - dependant
11. / School attainment of the person treated: did not attend a school
 - completed forms of the primary school
 - completed forms of the secondary school
 - completed years of a university
12. / Number of persons living together with the person treated (in a common household)
 - of which: a/ number of earners:
 - b/ number of persons under 15 years of age:
13. / Total monthly income of those belonging to the household:
14. / Title to dwelling of the person treated: owner occupier - tenancy - sub-tenancy - co-tenancy - other:
15. / Since when has the person treated lived in the dwelling, provided it is her own or she is a tenant:
16. / With whom is she living: alone - with the husband (partner in life) - with her father - with her mother - with her mother-in-law - with her father in law with her child with other relatives with non-relatives
17. / Number of dwelling rooms used by the persons belonging to the household of the person treated:
18. / How many persons sleep in the room serving as the dwelling room of the person treated:

19. / List of all pregnancies of the person treated:

Serial number of pregnancies	Year of					
	Live-births			Still-births	Induced	Spontaneous
					abortions	
1	19..	boy - girl	alive - dead	19..	19..	19..
2	19..	boy - girl	alive - dead	19..	19..	19..
3	19..	boy - girl	alive - dead	19..	19..	19..
4	19..	boy - girl	alive - dead	19..	19..	19..
5	19..	boy - girl	alive - dead	19..	19..	19..
6	19..	boy - girl	alive - dead	19..	19..	19..
7	19..	boy - girl	alive - dead	19..	19..	19..
8	19..	boy - girl	alive - dead	19..	19..	19..
9	19..	boy - girl	alive - dead	19..	19..	19..
10	19..	boy - girl	alive - dead	19..	19..	19..

20. / Before the present pregnancy did the person treated apply contraception regularly or not? Yes - no

21. / If yes, what method did she apply? Withdrawal - condom - pessory - douche - Timidon jelly - Cervical cap - periodical abstinence - injection - other, namely:

22. / If birth control was applied regularly what was the cause of pregnancy in your opinion: neglect of prevention - incorrect application of the method of contraception - other, namely:

23. / Does she want to bear further children: Yes - no - on certain conditions

24. / If not, why not:

25. / If yes, on what conditions:

26. / If you have had an induced abortion at present, under what point was it permitted: A - B

27. / If it were permitted under point "B", what were the main motives of her request:

Remarks of the physician completing the questionnaire:

CHAPTER 2 TCS 66 Study

2.1 Characteristics of the Survey

Under the joint auspices of the Research Group for Population Studies of the Central Statistical Office and the Demographic Committee of the Hungarian Academy of Sciences a survey of fertility, family-planning and birth control was organized and carried out at the end of 1965 and at the beginning of 1966. The survey, called the TCS 66 Study, had the following main objectives:

- a. to carry out a sample survey - selected by area - relating to the country as a whole, based on the experiences of the earlier TCS-study; and
- b. to attain international comparability with the data of studies performed abroad earlier.

The Hungarian study of 1965-1966 forms part of the series of international comparative studies initiated by the European Region of the International Planned Parenthood Federation whose draft was adopted in June, 1965, by the Research Committee on Family Planning Trends. Within the European region Hungary is the first country where this type of study has been performed; the experiences of the study may serve as a basis for carrying out similar studies in other countries.

The data collection programme of the Hungarian study surpassed considerably the minimum programme of a realizable international study. It also took into account the special Hungarian conditions and all the criteria that are necessary for international comparability, mainly within the European region.

The "Core" questions were as follows:

1. Social and economic characteristics of married couples; timing and character of basic demographic and family life-cycle events.
 - a. Criteria relating to the wife interviewed
 - b. Criteria relating to the husband
 - c. Dwelling and household data
2. History of pregnancies
3. Family planning
Attitude towards family size and childspacing
4. Birth control
Attitude towards family limitation
Past and future practice of birth control
Knowledge and communication about family limitation

In selecting the sample the following basic principles were applied:

- a. The sample should represent the attitude of married women between the ages of 15-49 towards fertility, family planning and birth control.
- b. The sample data should be sufficiently detailed as to allow basic conclusions to be drawn not only about the country as a whole but also about the different types of settlements (capital, other towns, communes) and larger regions.
- c. To ensure the high quality of the organization and data collection the sample should not be too dispersed; at least 8-10 persons should be enumerated by one enumerator.

To obtain significant national data, a 0.5 per cent sample, covering 0.5 per cent of the country's dwellings was adopted. The method of data collection consisted of, visiting the persons to be questioned in their homes, thus eliminating the biasing effect of data collected in medical-sanitary institutions.

The sample was taken on the basic principle that 0.5 per cent of the women sought be found in the given percentage of dwellings.

According to the data of the continuous population registration, 1,760,000 women aged 15-49 years lived in Hungary at the time of the survey, i.e. 8,800 women had to be interviewed. At the time of the pilot survey it was found that in a few cases the persons to be interviewed did not reply to the questions. Thus, beside 0.5 per cent of the dwelling stock of 1965, additional dwellings to the value of 2 per cent of this total were selected to replace the possible non-responses.

To prove the draft questionnaire and to evaluate the average duration of interviews in one dwelling, a pilot survey was performed in Budapest, and in one town and one village of the county of Pest in September, 1965. The pilot survey showed that the data collection was received with interest by the married women selected. As a rule, they did not consider it inconvenient, and the questionnaire was considered fit for use, with only minor modifications.

The pilot survey proved that the survey could only be carried out by the aid of well-trained interviewers who were acquainted with the problems of birth control and fertility and who were also familiar with the local conditions.

For these reasons, nurses were designated to perform the survey, so that, where possible, each district nurse could perform the interview in her own area.

Before starting the survey the county nurses charged with the collection of data attended a training course in Budapest. Detailed instructions for the course were available: "Instruction to Nurses concerning the Enumeration of Women Born between January 1, 1916 and December 31, 1950," edited by the Research Group for Population Studies of the Central Statistical Office, Budapest, 1965, (See abridged text, 3.3). This document contained instructions on the tasks of enumerators, on the scope of the survey, on the methods of enumeration, and on the completion of the questionnaires as well as including all other printed matters relating to the survey. It also comprised detailed instructions relating to the different questions of the questionnaire. The appendix of the "Instructions" gave detailed information on the methods of birth control.

The interview was performed by the village or town nurses, supervision being effected by the nurses in the chief town of the district. The basic principle was to spend about one hour on the completion of one questionnaire, in addition to the time of visiting each address.

The regional preparatory work of the fertility and birth control study was performed - under the guidance of the Central Statistical Office - by the regional and district authorities of the Ministry of Health. Six hundred and sixty-nine regional and district nurses participated in the survey. Their work was controlled by 34 staff members (well-experienced in field-work) of the Division for Population and Social Statistics of the Central Statistical Office as well as by 234 chief nurses in the regions, towns and districts.

During the training course the nurses charged with the data collection were handed a list of addresses containing the dwellings to be visited in the district. The first task of the interviewers was to state whether a 15-49 year old woman lived at the given address. Data were collected only in those dwellings where such a person was found. Where several such women lived in the same dwelling, all were enumerated. It follows from the above that the number of addresses to be visited surpassed the number of persons interviewed. According to the results of the study, 57 persons on the average, were enumerated per 100 dwellings. Although this proportion varied, considerably for different regions and different types of settlements depending upon age structure. For instance, in Budapest, married women between the ages of 15 and 49 were found in 51 per cent of the dwellings while in one provincial county the corresponding figure was 69 per cent. The original computations also reckoned with a 59-60 per cent proportion during the enumeration. It should be noted that since the enumerators had a twofold aim, namely to visit the addresses and to enumerate, both tasks were taken into account when reenumerating them for their work.

To ensure the undisturbed performance of the survey special attention was paid to the fact that the women questioned should be in a position to express their opinion and give their reply in undisturbed circumstances, free from any external influences. Thus in most cases, the interview was in the form of a discussion between the nurse and the woman questioned, with the exclusion of other persons, if possible, in the absence of the husband. Where this could not be attained due to the dwelling circumstances, the interview took place in the working place of the nurse, by the common agreement of the two parties.

Before starting the study, 310 additional addresses were selected to replace non-responses and omissions. This number was justified by the results of the survey: in 84 cases, the women to be interviewed (married and aged 15-49 years) living in the selected dwelling refused to reply. Besides, in about 250 cases, the interview did not take place because during the period of data collection the women living in the selected dwelling were not found at home due to illness, hospital treatment or staying abroad etc. Such cases were registered mostly in Budapest and in the larger towns. 150 from among them, however, were found and interviewed as a result of repeated visits in January, 1966. Thus 102 women selected for enumeration were omitted. Compared with the proportion of all persons interviewed the proportion of women who refused to reply was only 0.95 per cent, and that of

omissions 1.14 per cent. It proved expedient to enumerate 198 additional persons to replace the 186 women in these two groups. The survey covered 8,800 married women in all.

Sixty per cent of the nurses participating in the survey were under 30 years of age, 21 per cent were aged between 30-39 years and 19 per cent were over 40 years of age. 35 per cent of the enumerators were unmarried, 60 per cent married, and 5 per cent widowed and divorced. On account of this, somewhat more than half of the nurses were child less. It was assumed that young and unmarried nurses are less fit for data collection on account of the scope of the questions. Experience, proved the contrary, however, the younger nurses performing their work with more enthusiasm and more reliably than their older colleagues and while the willingness to answer of the persons questioned by them was also stronger.

The educational level of the data collectors was high, two thirds of them having finished secondary school. Each of the participants of the survey had completed a nurses training course lasting four years. In spite of their young age structure their nursing activity was relatively long: 43 per cent had practiced longer than 10 years and 20 per cent had practiced between 5-10 years. At the same time, less than 4 per cent had been practicing for less than one year.

Practically, all the nurses performed the enumeration in her own place of residence and only 3 per cent had to perform the work in other settlements.

Regarding the composition of the sample the most important criterion is its age structure as compared to that of the total married, female population. Comparisons have shown that the population of the TCS 66 sample was very close to the composition of the total population and can, therefore, be regarded as highly reliable. Regarding the four large age groups, we find that in the composition of the sample the proportion of the youngest is slightly lower, and the proportion of other age groups slightly higher than in the total population.

A significant deviation can be found only among those under 25 years of age whose number in the sample is 9 per cent lower than in the total population. But after the correction of the sample and after including in the sample of the new dwellings built in 1965 this group distribution becomes more reliable.

Beside the personal criteria, the number of pregnancies of the women in the sample was also studied. The data of their live-births and induced abortions

were recorded for each year between 1960 and 1965. The data were then compared with the results of the regular full-scope data collection relating to births and legal induced abortions. The comparison showed that in respect of the number of live-births the TCS sample can be regarded as fully accurate. The number of live-births of the women in the sample corresponds with the national data with an error of \pm 5 per cent in each year.

The figures of induced abortions, however, cannot be regarded as reliable. Between 1960 and 1965 the women in the sample reported, on the average, only 50-60 per cent of their induced abortions as compared with the full-scope data collection. This means that even with this form of interview when the use of nurses ensures best quality data only 55 per cent of the permitted induced abortions could be obtained.

The denial of induced abortions and its probable causes require further study and calls attention to the fact that this figure can only be obtained with difficulty. This seems to be especially important for if in a legal abortion system - where the permission and carrying out of induced abortions takes place through the channels of the national health service - the concealment of induced abortions assumes such high proportions, the question arises as to how far can concealment be spread in countries where induced abortion is illegal.

The unreliability of the data relating to induced abortions does not detract from its usefulness, since our aim was not so much to record but to analyse the whole problem, i.e. to obtain such data on family planning and birth control as have not been known to us so far. The number of induced abortions by age, marital status, social status, number of children etc. and the distribution of the aborting women can be obtained from the annual, regular data collections, and further aspects of the problem can be clarified on the basis of the sample survey of 1960 and 1964 respectively. The biasing impact of the denials on the history of pregnancies, and on fertility and family planning, can be eliminated by means of the data available and the reported data can be corrected.

The experiences of the Hungarian fertility and family planning study of 1965-1966 can be summarized as follows:

1. The study of the problems of fertility and family planning can best be realized by means of areal sampling covering the total female population. The previous studies - which were not based on the residence of the women - can be used

only roughly due to their limited scope as they were connected with doctors and health institutions.

2. When carrying out the study fullest secrecy, and, consequently, the reliability of the replies of the women questioned should be ensured. This can be provided only by means of well-trained interviewers who are close to the women, mainly through health service workers.

3. When processing and analysing the data, the conditions prevailing at the time of the data collection should be taken into account. This is especially necessary when making comparisons with past and foreign data. In this respect the importance of studies suited for international comparisons and based on the same principles, and containing, if possible the same scope, content and a similar sampling, should be stressed.

4. A comparison of the data included in the programme of the study with other independent sources should be ensured. In this way the accuracy of the data can be estimated and where the accuracy of the data reported by the individuals, for instance, on abortions, cannot be accepted, the data can be corrected or the given group of data can be omitted without influencing the usefulness of the other data of the study.

2.2 TCS 66 Study Questionnaire

CENTRAL STATISTICAL OFFICE
Research Group for Population Studies

A QUESTIONNAIRE
for women born between
January 1, 1916 and
December 31, 1950

I. PERSONAL DATA OF THE WOMAN ENUMERATED

1. Place and date of birth:

1/a. where were you born?

	commune
.....	(town)

1/b. when were you born?

day	month	19	
-------------	-----------------	------------	--

2. Residence:

2/a. where do you live
at present?

	commune
.....	(town)

2/b. since when have you
been living there?

day	month	19	
-------------	-----------------	------------	--

2/c. where did you live
before?

	commune
.....	(town)

3. Marriage data:

Number	Date of concluding the marriage	Date of	Reason for
		ceasing the marriage	
1.	day month 19..	day month 19..	widowing - divorce
2.	day month 19..	day month 19..	widowing - divorce
3.	day month 19..	day month 19..	widowing - divorce

3/a. Do you live together with your husband? 1. yes - 2. no
 if not, since when have you been living separately? month 19...

3/b. During the marriage did you live separately from your husband for a period longer than 6 months? 1. yes - 2. no
 if so, from what time to what time?

4. Educational level:

4/a. what type of regular school did you attend and how many forms did you complete?	did you obtain a secondary school leaving certificate or a university degree?
you completed, ... forms of the primary school	4/b. type of the secondary school leaving certificate
you completed, ... forms of the upper " "
you completed, ... years of the university (academy)	4/c. type of university degree

5. Occupational data:

5/a. occupation

5/b. occupational status: 1. non-manual worker - 2. skilled worker - 3. semi-skilled worker - 3. agricultural worker - 5. unskilled worker - 6. day-worker - 7. home worker - 8. self employed - 9. unpaid family worker - 10. pensioner - 11. other, namely

5/c. name of employer (in detail)

6. Have you ever had a paid job during your life? 1. yes - 2. no
 if so:

6/a. from what time to what time did you work?	6/b. for what reasons did you stop working (for instance, marriage, confinement, upbringing of a child, disease etc.)?
from 19... to 19...	
from 19... to 19...	
from 19... to 19...	

6/c. If you are not employed at present do you want to work in the future?
 1. yes - 2. no

6/e. If you work at present, do you want to discontinue it?
 1. yes - 2. no

6/d. if so, under what condition:

1. if you find employment 2. if your child grows older 3. if you can leave the care of your child to another person 4. if your state of health improves 5. on other conditions
--

6/f. if so, why:

II. PERSONAL DATA OF THE HUSBAND (PARTNER IN LIFE)

7. Place and date of birth:

7/a. where were you born?

	commune (town)
--	-------------------

7/b. when were you born?

day	month	year
---------------	-----------------	----------------

8. Educational level:

8/a. what type of regular school did you attend and how many forms did you complete?	did you obtain a secondary school leaving certificate or a university degree?
you completed. . . . forms of the primary school	8/b. type of the secondary school leaving certificate
you completed. . . . forms of the upper " "	
you completed. . . . years of the university (academy)	
	8/c. type of university degree

9. Occupational data:

9/a. occupation:

--

9/b. occupational status:

1. non-manual worker - 2. skilled worker - 3. semi-skilled worker - 4. agricultural worker - 5. unskilled worker - 6. day-worker - 7. home worker - 8. self employed - 9. unpaid family worker - 10. pensioner - 11. other, namely
--

9/c. name of the employer (in detail):

--

III. DWELLING AND HOUSEHOLD DATA

10. Number of rooms and title of the dwelling:

10/a. How many rooms does your family use? of which the number of living rooms: - the dwelling consists of one room

10/b. Under what title does your family (household) use the dwelling: 1. owner - 2. tenant - 3. co-tenant - 4. sub-tenant - 5. night-lodger - 6. other, namely:

11. Equipment in the dwelling:

11/a. the dwelling is equipped with:

1. electricity - 2. running water - 3. gas - 4. water closet - 5. bath room

11/b. do you have in your household

1. a washing machine - 2. a refrigerator - 3. a television set - 4. books - 5. a motor cycle - 6. a motor car

12. Members of your household:

Number	Marital status (in relation to the woman questioned) e. g. husband, child, father etc.	Year of birth	Occupation	Monthly income in Forints (on basis of the average of the first half of 1965)
of those belonging to the household				
1.	the woman questioned	1. . . .		
2.	the husband of the woman questioned	1. . . .		
..		
7.		1. . . .		

IV. DATA OF THE CHILDREN BORN

13. How many children were born to your mother and to your maternal grandmother?

a/ total number of children born to your mother

b/ total number of children born to your maternal grandmother

14. Data of your liveborn children:

Number	Date of birth			Christian name, sex (F = boy L = girl)	Weight at birth, grams	Length of time of lactation	Care of child (e. g. only the parents, grandparent, in a crèche, kindergarten, etc.)	Monthly sum (in Forints) spent on care (only the sum paid to the crèche, kindergarten or the person in charge caring for the child is to be indicated)
	Year	Month	Day					
of the child under 15 years of age								
1.	19..			"F"- "L"				
..				
8.	19..			"F"- "L"				

14/a. Did any of your children have a congenital malformation? if so, please, enter the corresponding number of the child from the table and specify the malformation:

14/b. If any of your liveborn children died, please, enter the corresponding number of the child from the table as well as the day, month and year of the death:

V. FAMILY PLANNING

15. When concluding your marriage did you think of how many children you wanted to have in all?

if so:

15/a. how many children did you want to have?

15/b. did you discuss the desired number of children with your husband?

15/c. if so, your husband:

15/d. did you have any idea of the order of confinements?

if so:

16. Did you change your opinion about the desired number of children in the course of your married life?

if so: 16/a. in which year of your marriage did you change your opinion?
16/b. how has your opinion changed?



because: ↓

1. in case of answers No. 1. or No. 2. give your reasons in the Table below on basis of the pre-printed answer to question 27/j in Chapter VII.

- 1. your financial circumstances have improved
- 2. your children now living desire it
- 3. you can care for more children
- 4. you want to have a child from your new marriage
- 5. you did not want to have more children but you became pregnant and do not want an abortion
- 6. for other reasons, namely:

.

17. Do you want to bear in the future?

1. yes	2. conditionally	3. you have not decided	4. no
--------	------------------	-------------------------	-------

if yes, when

on what conditions:

if not, why not (please, give your answer on basis of the answers of Table 27/j.)

1. in the year 19.. 2. you leave it to nature	1. if your state of health improves 2. if your income increases 3. if you get a proper flat 4. if your flat is furnished 5. if you need not work 6. if you obtain a higher family allowance 7. if your family life becomes settled 8. on other conditions, namely .	
--	---	--

if you plan to perform your confinement in 1968 or later what are your reasons for it

1. your child now living will grow older 2. it will finish its studies 3. for other reasons, namely

18. Under your present conditions how many children do you want to have in addition to your children now living?

. children, of which boys, girls

19. Are you pregnant now? 1. yes - 2. no

19/a. in which . . . month of the pregnancy are you

19/b. if you have been pregnant for less than 3 months do you want to bear the child:

1. yes - 2. no

20. Irrespective of your present conditions how many children do you think to be desirable in a family? children - you have no opinion

21. If your married life started now, how many children would you want to have in all?

. children - you have no opinion

22. How many children do you consider a large family:

. or more

VI. FERTILITY AND FAMILY PLANNING DATA

23. Have you ever been pregnant in the course of your life?

1. yes - 2. no

If so, please, answer the questions below in connection with all pregnancies

No. of pregnancies	Did you use birth control before the pregnancy?	If you used birth control state which method was used	Date	Way
			of terminating pregnancy	
1.	1. you did not use birth control 2. you used birth control irregularly 3. you used birth control regularly	1. coitus interruptus 2. condom 3. diaphragm 4. douche 5. Timidon and other jellies 6. rhythm method 7. other, namely:	month.... year 19..... duration of the pregnancy months	1. livebirth 2. stillbirth 3. induced abortion 4. extrauterine pregnancy 5. spontaneous abortion
2.	1. you did not use birth control 2. you used birth control irregularly 3. you used birth control regularly	1. coitus interruptus 2. condom 3. diaphragm 4. douche 5. Timidon and other jellies 6. rhythm method 7. other, namely:	month.... year 19..... duration of the pregnancy months	1. livebirth 2. stillbirth 3. induced abortion 4. extrauterine pregnancy 5. spontaneous abortion
3.	1. you did not use birth control 2. you used birth control irregularly 3. you used birth control regularly	1. coitus interruptus 2. condom 3. diaphragm 4. douche 5. Timidon and other jellies 6. rhythm method 7. other, namely:	month.... year 19..... duration of the pregnancy months	1. livebirth 2. stillbirth 3. induced abortion 4. extrauterine pregnancy 5. spontaneous abortion
4. x/	1. you did not use birth control 2. you used birth control irregularly 3. you used birth control regularly	1. coitus interruptus 2. condom 3. diaphragm 4. douche 5. Timidon and other jellies 6. rhythm method 7. other, namely:	month.... year 19..... duration of the pregnancy months	1. livebirth 2. stillbirth 3. induced abortion 4. extrauterine pregnancy 5. spontaneous abortion

24. Have you any organic or other chronic disease which hinders you bearing a child:

1. yes - 2. no

if so, specify the disease:

VII. BIRTH CONTROL (PREVENTION)

25. Did you use birth control before your last pregnancy?

1. you did not use birth control

2. you used birth control irregularly

3. you used birth control regularly

why did you not use birth control (please, give your answer in the table below on basis of the reply to question 26/k)

why did you use birth control irregularly

1. you found it inconvenient
2. you did not take much care over birth control
3. you did not regard pregnancy as a great trouble
 - 3/a. you placed confidence in induced abortion
 - 3/b. you would have borne the child
4. for other reasons, namely....

what was the cause of your pregnancy

1. the birth control method was used improperly
2. the means of contraception was defective
3. you stopped using birth control because you wanted to have a child

26. Do you use birth control at present (in the course of 1965)?

1. yes - 2. no

27. If your reply to the above question is in the affirmative, please, reply to questions 27/a - 27/j.

27/a. since when have you been using birth control? since the year: 19.....

27/b. method and frequency of birth control at present:

	regularly	irregularly
1. coitus interruptus	"	"
2. condom	"	"
3. diaphragm	"	"
4. douche	"	"
5. Timidon and other jellies or cream	"	"
6. rhythm method (calendar method)	"	"
7. cervical cap	"	"
8. tampon, sponge	"	"
9. sexual abstinence	"	"
10. Timidon tablets or other chemical contraceptives	"	"
11. oral pills	"	"
12. intrauterine devices	"	"
13. sterilization: of the woman - of the man	"	"
14. other methods, namely:	"	"

if you use several methods of birth control

27/c. 1. do you use them jointly - 2. do you use them alternately

27/d. which do you use as the chief method (enter the corresponding number of the table)

27/e. since when have you been using the chief method? 19....

27/f. which do you regard as the most effective one? (enter the corresponding number of the table)

27/g. Have you used other birth control methods since your last pregnancy?

1. yes - 2. no

if yes, 27/h. which method did you use (enter the corresponding number of the table)

27/i. since when have you used it: from 19.... to 19....

27/j. The motives of your present birth control:

1. illness at present	13. you are anxious about the future of the child
2. fear of falling ill	14. the last child is still too young
3. previous difficult pregnancy or confinement	15. you do not want to have more children
4. fear of bearing an abnormal child	16. you want to prolong the interval between pregnancies
5. age: too young - the husband is too young - too old - you consider your husband old	17. you find frequent pregnancies inconvenient
6. financial difficulties at present	18. your husband does not want a child
7. the upbringing of the child costs too much	19. you are influenced by parents, relatives; by the example of others
8. you wish to maintain the present living standard of the family	20. you want to fix the date of the confinements yourself
9. difficulties (troubles) in connection with the care of the child	21. school studies: you study yourself - your husband studies
10. you wish to maintain your liberty (quietness)	22. other, namely:
11. your housing conditions are bad	
12. you want to undertake a job	

if there are several motives which do you consider the principal one?
(enter the corresponding number of the table)

28. If you do not use birth control at present (your reply to question No. 26. was in the negative) please, reply to questions 28/a - 28/f.

28/a. Reasons for neglecting birth control:

1. you do not want to restrict the number of your children	9. you consider using birth control inconvenient
2. you want to have a child (because you have not reached the planned number of children)	10. religious reasons
3. you want to have a large family because	11. moral reasons
4. you are anxious about of your health	12. you reckon with the possibility of an abortion
5. you do not know a proper means	13. sterility
6. you leave all to nature	13/a. since when have you been sterile: since 19.....
7. you consider the known methods of birth control unsuitable	13/b. what has caused your sterility.
8. your husband does not want to use birth control	14. illness (impotency) of the husband
	15. Other reasons, namely:

If you have several reasons which do you consider the principal one? [.....] (enter the corresponding number of the table)

28/b. do you want to use any method of birth control in the future?

1. yes - 2. no

28/c. if yes, in what cases: 1. if you do not want to have more children

2. if you knew a proper means
3. if the birth control methods were safer
4. in other cases, namely:

28/d. did you use birth control after your last pregnancy? 1. yes - 2. no

if yes, 28/e. what method did you use? [.....] (enter the corresponding number of table 27/b)

28/f. since when: from [19....] to [19....]

29. Have you obtained any information about the methods of birth control (prevention)?

1. yes - 2. no

29/a. if yes, from whom:

1. from a specialist - 2. from a general practitioner -
3. from a district nurse - 4. from your husband -
5. from a parent - 6. from a pedagogue - 7. from relatives - 8. from a lady-friend - 9. from other acquaintances

29/b. In what other ways have you obtained information about the methods of birth control (prevention):

1. from scientific lectures for the general public
2. from a film concerning health
3. from a health publication
4. from a health periodical
5. from other sources, namely:

29/c. Have you received practical instruction? 1. yes - 2. no

30. Have you had an induced abortion? 1. yes - 2. no

3/a. if so, why did you choose this method:

1. you did not use birth control, but you did not want to bear your child
2. though you used birth control, you still became pregnant
3. you do not like to use birth control and prefer induced abortion
4. for other reasons, namely:

30/b. Why did you not want to bear your child:
(Enter the number of the corresponding reply from the replies of table 27/j.)

31. Are you willing to subject yourself to induced abortion in the future?

1. yes - 2. no

if not, what do you do to avoid this:

1. if you become pregnant, you will bear your child - 2. you use birth control regularly (on basis of the replies of table 27/b.)

32. Do you agree with the present system of permitting induced abortions:

1. yes - 2. no

if not, what modifications would you recommend:
.

Are you willing to reply to similar questions in the future: yes - no

Would you undertake to keep records on your methods and experiences of birth control (prevention) for a period of time: (yes - no)

Remarks of the nurse:

ENUMERATION EXPERIENCES:

The person interviewed

- 1. was willing - 2. unwilling

to reply to the questions.

During the interview the respondent

- 1. was communicative - 2. reserved

Did the woman interviewed take professional advice, and did she show any interest in the methods of prevention?

- 1. yes - 2. no

Where did the interview take place?

- 1. in the dwelling of the respondent -
- 2. at the nurse - 3. in another place

Beside the nurse and the person interviewed

- 1. nobody else was present - 2. other person/s/
namely
was (were) present

Other remarks:

town , month , year

.....
Signature of the nurse

2.3 Instructions to Interviewers

Instruction to Nurses concerning the Enumeration of Married Women Born between January 1, 1916 and December 31, 1950 (Abridged Version)

The Research Group for Population Studies of the Central Statistical Office intends to organize a birth control and fertility survey in order to enumerate 0,5 per cent of the married women born between January 1, 1916 and December 31, 1950. The survey has been authorized by the President of the Central Statistical Office under No. 18101/1965/E.

Budapest, October, 1965

Central Statistical Office
Research Group for Population Studies

I. Duties of the Nurses

Under the guidance of the Central Statistical Office the questionnaires are completed by the nurses appointed.

During a one day training course the nurses are instructed by the staff members of the Central Statistical Office about their enumeration duties, the questionnaires and the rules of their completion.

The questionnaires needed and the "List of addresses" about the dwellings to be visited are handed over to the interviewers during the training course.

In each county the survey is organized by the chief county nurse who is assisted in her work by the chief district and town nurse. Together they control the pace and quality of the enumeration in their region belonging to her. The questionnaires completed by the nurses are controlled by the chief district nurses respectively town nurses.

The regional nurses have to observe the orders of the chief nurses and to correct immediately the faults found by the chief nurses and the workers of the Research Group for Population Studies of their the Central Statistical Office.

The interviewers are paid for their enumeration work. The rates of pay for the survey are contained in the printed matter "Accounts".

It is forbidden to show the completed questionnaires to such persons as did not participate in the survey. The completed questionnaires constitute official secrets; their data may be used for the purposes of statistical processing alone. It is forbidden to relate the information received to anybody, or, to use the data for other purposes during the survey or later.

II. Scope of the Survey, and Method of Interview

During the enumeration it is the task of the regional nurses to visit all the dwellings indicated on the "List of addresses" and to ask whether a married women, born between January 1, 1916 and December 31, 1950, lives in the dwelling permanently. If this is the case, for each woman who lives in the dwelling and meets the above requirements separate questionnaires have to be completed.

The addresses are selected on the basis of the situation in 1963; it may, therefore, happen that the dwelling is no longer occupied by the family whose head is given in the "List of addresses". In this case, too, the enumeration has to be performed in the dwelling selected for which another address cannot be substituted. This means that the family (whose head is indicated in the "List of addresses") no longer lives in the dwelling selected. This family should not be visited and the interview must be performed at the given address. Even if the dwelling is demolished or vacant and the enumeration cannot take place, another dwelling cannot be substituted.

It is forbidden to enumerate married women who do not meet the above requirements, i. e. who were born before January 1, 1916 or after December 31, 1950. Questionnaires which were filled in about such women, must not be used, and the work of their completion is not paid for. Similarly it is forbidden to complete questionnaires about women who were born between January 1, 1916 and December 31, 1950, who might have lived in marriage earlier but are no longer married because they have divorced or widowed and have not married again. Those women in the corresponding age, however, who are legally married but do not live together with their husband for any reason or live together with another man, have to be enumerated.

The survey - on account of its nature - has to be performed with complete discretion. It is, therefore, expedient to perform the interview in the absence of alien persons, even family members, and to base it exclusively on the interview between the nurse and the woman concerned. Efforts must be made to create such circumstances in which the interview cannot be disturbed by anybody. If the dwelling conditions or large number of the family members do not make this possible it is advisable to request the woman concerned to visit the nurse at her place of working where the interview can be performed under undisturbed conditions. In every case the questions should be put by the nurse to the person to be enumerated alone, i. e. it is forbidden to gather the necessary information from persons other than the woman to be enumerated.

Before the enumeration starts it is useful if the nurse informs the woman to be interviewed about the purposes of the enumeration and about the fact that she has been selected at random. If the woman to be interviewed is reluctant to answer she has to be informed that neither her name nor her address will be entered on

the questionnaire. If, in spite of this, there are questions which the woman refuses to answer, the remark "non-response" should be entered in the corresponding part of the questionnaire.

During or after the interview beside the completion of the questionnaire, the three last columns of the "List of addresses" should be filled in about the address visited. After the completion of the three columns following the serial number (street number, house number, floor and door number and the name of the head of family living in the dwelling), the performance or non-performance of the enumeration should also be indicated in the appropriate three columns.

The entries can be as follows:

1. If a woman of the corresponding age and marital status lives in the dwelling selected, and a questionnaire is completed about her, the name of the woman should be entered in column 4.

2. If not, i. e. if no enumeration takes place, columns 4 and 5 should be crossed out.

3. If the dwelling is demolished or vacant, the remarks: "the dwelling is demolished" or "the dwelling is vacant" should be entered in columns 4 and 5.

4. It may occur that a woman of appropriate age and marital status lives in the dwelling but due to her long absence she could not be found by the enumerators. The reason for omitting her from the survey should be entered in columns 4 and 5; for instance, she was in a hospital for six months or she was in another commune during the enumeration or she was abroad.

5. It may occur that a woman of the corresponding age and marital status lives in the dwelling and refuses, however, to reply. The following remark should be entered in columns 4 and 5: "she was unwilling to reply".

III. Completion of the Questionnaire. General Rules

On the last page of the questionnaire there is space for the remarks of the nurse and for a summarizing description of the circumstances of the enumeration. In case the answers are vague or unclear it is expedient if the nurse gives an explanation of this in the column "Remarks of the nurse". The answers for which

there is no space enough on the questionnaire should also be entered here; for instance, in case of more than three marriages or more than eight livebirths etc.

On each questionnaire completed the nurse has to indicate how the woman enumerated received her and if the woman was willing to reply to the questions. Besides, the nurse has also to indicate the date of the enumeration and to sign all the questionnaires.

IV. Printed Matter for the Survey

At the training course the nurses are given the following printed matter:

1. A "List of addresses" which contains the exact addresses of the dwellings to be visited in the course of the enumeration.
2. Questionnaires (in the number required) about the married women born between January 1, 1916 and December 31, 1950.
3. A "Supplementary Sheet" to page 5 of the questionnaire, to be used if the respondent had more than 6 pregnancies during her life. In this case the "Supplementary Sheet" has to be put in the questionnaire after the original sheet.
4. "Instruction" which contain the method of filling in the questionnaire and gives general information also.
5. Three cards which contain the preprinted answers to questions 27/b, 27/j and 28/a of the questionnaire. The are enclosed to make it possible for the woman interviewed to give the appropriate reply to the questions. In the case of some questions there are no preprinted replies, only reference is made to any of the above three questions; in this case, too, the woman interviewed may indicate the corresponding reply on basis of the cards.
6. "Accounts" to record the expenses of the enumeration.
7. The questionnaire "Data about the Nurse Performing the Enumeration", containing questions about the personal data of the nurse. It serves to summarize her enumeration experiences.

V. Completion of the Questionnaire

The questionnaire about the married women born between January 1, 1916 and December 31, 1950 consists of 7 parts. The main parts are as follows:

- I. Personal data of the persons interviewed
- II. Personal data of the husband or life partner
- III. Dwelling and household data
- IV. Data about the children born
- V. Family planning
- VI. Fertility and birth control data
- VII. Birth control

The serial number of the dwelling, to be found in the first column of the "List of addresses", should be entered in the part encircled, beside the column "Serial number", which is in the right-hand upper corner of the questionnaire.

Completion of Part I of the questionnaire. Personal data of the persons interviewed

1. Place and date of birth

In reply to question 1/a the permanent residence of the mother at the birth of the person interviewed should be entered as birth place. Thus in case the birth did not take place in the permanent residence of the mother but in a hospital or in a maternity home of another town, the permanent residence of the mother should be indicated. The same relates also to question 7/a of Part II.

2. Residence

In reply to question 2/c the permanent residence before the present one should be entered. When replying to questions 2/b and 2/c, the change of residence within the settlement should not be taken into account. For those who live at their place of birth and did not change their residence during their life, the date of birth should be entered in reply to question 2/b while question 2/c should be crossed out.

3. Marriage data

In this table - at least in the first row - an entry should be made. In case of several marriages the marriage data should be given in the chronological order of the years of marriages. In case of women whose marriage ceased due to divorce or widowhood, an entry should be made in the next row, too. If the woman interviewed did not marry again after the divorce or after becoming a widow, she is unmarried and no questionnaire has to be completed about her.

In question 3/a the actual cohabitation within the legally existing marriage is asked. The second part of the question should be answered only if the woman does not reply to the question concerning cohabitation. In this case the date of beginning the permanent separation should be entered.

Question 3/b relates not only to the present marriage but also - in case of several marriages - to all marriages. Therefore, in case the woman lived for more than 6 months separately from her husband during her present or earlier marriage the answer "yes" should be marked with a circle and the duration of the separation should be entered in reply to the next question; for instance, from November 1956 until July 1957. If of several separations occurred each should be listed separately. By separation is meant the absence for more than six months of any of the spouses during which they could not meet at all.

4. Educational level

Only replies relating to studies performed in regular schools, i. e. those which are preprinted, can be given to question 4/a. The replies should be based on the present educational system.

The number of forms or years completed should be entered for all schools attended regularly.

In reply to question 4/b, for those who finished their secondary school studies successfully obtained a secondary school leaving certificate, the exact name of the secondary school leaving certificate should be indicated in reply to question 4/b, whereas in reply to question 4/a for those who finished a university the type of the diploma should be entered.

The same also relates to questions 8/a, 8/b and 8/c of Part II.

5. Occupation

Question 5/a, about occupation, should be answered for all persons interviewed irrespective of their being dependant or gainfully occupied. In the case of those gainfully employed, i. e. those employed by a company, institution, factory, plant, even if they are home workers, or only help in a plant, workshop or on the farm of a self employed person (unpaid family members), the concrete occupation should be entered.

In the case of dependants who have no gainful occupation, the role they play in the family (household member, head of household), should be entered.

For those who are employed in several working places at the time of the enumeration, and have a secondary occupation, the main occupation should be entered, whereas for those and are employed seasonally for the great part of the year, and have neither a permanent nor a seasonal occupation, the most frequent occupation during the year should be indicated.

5/b. Occupational status

In reply to question 5/b, only the occupational status of the earning person should be entered. In the case of dependants this question should be ignored.

1. The answer "non-manual" should be marked with a circle and applies to those who carry on a liberal profession or perform administrative work. Answers 2-7 relate to manual workers.

2. Skilled workers are those who possess a skilled worker certificate in the field of their current occupation.

3. Semi-skilled workers are those who perform concrete manual work without a skilled worker qualification.

4. Agricultural workers are those who are employed by agricultural producers' co-operatives or state farms in an agricultural sphere of activity.

5. Unskilled workers are those who have no qualifications, who do not work in a specific line and are employed as loaders, transporters, chars and in similar jobs.

6. Day workers are all those who perform changing work in changing working places either within or outside agriculture; their work does not require any qualification.

7. Home workers are those who perform their work for companies and co-operatives at home.

8. Self employed workers are those who work on their own farm, in their own workshop, or shop and are not employed by a company or institution.

9. Unpaid family workers are the family members of independents or the members of producers' co-operatives who work without pay.

5/c. Name of the employer

Question 5/c should be answered only by those gainfully employed. By employer is meant a company, office, co-operative etc., in which the person enumerated is engaged either as a wage-earner or a salaried employee or as a co-operative member.

In the case of persons who - in reply to question 5/b - marked the answers "self employed" or "unpaid family member" with a circle the terms "agricultural" or "non-agricultural" should be entered additionally.

What has been said with regard to questions 5/a, 5/b and 5/c relates also to questions 9/a, 9/b and 9/c of Part II.

6. Did the woman carry on a gainful occupation during her life?

Question 6/a should be answered by women who worked some time during their life and replied to this question in the affirmative. In the case of those who never discontinued their earning activity, only the year of beginning their work should be entered in the first row, whereas in the case of those who worked but discontinued their work for any reason, the year, and in reply to question 6/b, the reason of discontinuing their work should be entered.

By the discontinuation of a paid activity is meant, as a rule, a break of employment from an earlier working place and subsequent unemployment. When there was no break in employment but the person did not work actually for more than one year an exception is made. Such cases are, for instance: long lasting illness or a long unpaid holiday after the maternity holiday to take care of the child, which, together with the maternity break, lasts for more than one year.

In the case of respondents who are employed at present, questions e and f should also be answered.

If the woman interviewed does not work at the time of the enumeration she should be asked if she wants to work in the future, and, if so, under what conditions. The respective answers should then be entered for questions 6/c and 6/d.

Completion of Part III of the Questionnaire Dwelling and Household Data

By household is meant, in general, the group of persons living together and taking their meals together.

Beside the woman, her husband and children, a household includes also the father, mother, possibly the brother, aunt etc. of any of the spouses living in the family. If two or more married couples live in the selected dwelling and are related to one another, for instance, the parents of the married couple, the children of the married couple or the married couples made up of brothers or sisters, they should all be regarded as belonging to the same household. If two or more 15-49 year old married women live in the household, separate questionnaires should be completed for them.

Lodgers, night lodgers, domestic servants or other unrelated persons do not belong to the household. If, however, the lodger, night lodger, possibly the domestic servant or other unrelated person meets the requirements of the survey (if she is a 15-49 year old and married woman) a separate questionnaire should be completed for her.

10. Number of rooms

In reply to question 10/a, the number of all rooms used by the family, and in the next part the number of living rooms should be entered. If two or more unrelated households or families live in the dwelling, only the number of rooms used by the household of the woman enumerated should be entered.

Rooms are defined as those whose floor space exceeds 12 square metres and which serve as bed-rooms, sitting rooms, dining rooms, saloons, reception rooms, children's rooms, halls etc. Rooms with a smaller floor space (6-12 square metres) used for the same purpose should be entered as half rooms.

A dwelling room is a premise for living with a floor space exceeding 12 sq. metres, serving day-time living; it has a warm floor, a door and windows opening on to a public area or a courtyard; it is provided with heating facilities.

12. Who belongs to the household family?

All the persons related to one another and belonging permanently to the household should be listed in the table. The number of children listed in Table 12 does not coincide in all cases with the number of children listed in Table 14 since out of the liveborn children listed in Table 14 any might have died or left the parents. Table 12 should also contain the children adopted and cared for, despite the fact that they were not born to the woman enumerated.

Relatives pertaining to the household, for instance, the mother, father, brother etc. of the person enumerated, can be entered only after indicating the children. The family status of all persons related to the woman enumerated should be entered, without indicating any name.

In the last row of the table the average monthly income of the gainfully employed persons should be entered in Forints, i. e. the monthly average earnings received in the first six months of 1965 (the income of six months divided by 6). The average monthly sum derived from a secondary occupation, from bonuses, family allowances or other allowances should be added.

In the case of members of producers' co-operatives one twelfth of the working unit converted into Forints as well as one-twelfth of the annual income derived from the household plot should be entered.

Completion of Part IV of the Questionnaire
Data of the Children Born

13. Children of the mother and of the maternal grandmother

In reply to question 13/a all the children born to the respondent's mother should be entered, i. e. the respondent and the number of her brothers and sisters, with the exception of the children adopted, whereas in reply to question 13/b the mother of the respondent and the number of her brothers and sisters, i. e. the

children born to the maternal grandmother of the respondent, should be entered. It may occur that the woman enumerated does not know exactly the number of children of her grandmother; in this case the approximative number should be asked; if this also causes difficulty, the number of the living children should be entered with the remark that it differs from the number of children born.

14. Data of liveborn children

In the table relating to question 14 all the liveborn children of the respondent should be listed in the chronological order of birth.

In the first three rows following the serial number, the exact date of birth of the children (year, month, day) and, in the next column, the Christian name of the child should be entered. At the same time symbols F or L indicating the sex of the child born (boy, girl) should be marked with a circle.

The weight at birth should be given in grammes and the length of time of the lactation in months.

The next two rows relate to children who had not yet completed their 15th year of life at the time of the enumeration, i. e. who were born in 1951 or later.

In the first row the way of care for the children under 15 years of age should be entered. If the child spends all his day in a crèche or kindergarten or is cared for by the grandmother or by another person, the answer should be entered accordingly. Only the sums which were paid by the family to the organisation caring for the child or to the persons indicated in the preceding column can be entered in the individual rows. The table relates only to the liveborn children of the woman enumerated. It may occur, however, that the woman enumerated cares for a child adopted or the child of her consort. If Table 12 also contains a child under 15 years of age born to a woman other than the enumerated one, some of its data should also be entered in Table 14 and a thick line should be drawn after the data of the liveborn children and in the next row the date of birth, the name, and the method of caring for the child as well as the sum spent on its care should be entered just as in case of the natural children.

In reply to question 14/a the serial number, and the Christian names of children with congenital malformations should be entered from Table 14; the con-

genital malformation should be indicated. If there are several such children all should be entered in the chronological order of births.

In reply to question 14/b, the serial number, Christian name and exact date of death of liveborn children who died should be entered.

- . -

When completing the additional part of the questionnaire it frequently occurs that questions arise which either exclude or make it necessary to answer the following questions. They can be summarized briefly as follows:

Beginning with question 15 the respondents can be divided into two groups according to their attitude towards family planning and birth control and certain questions should be put only to women belonging to one of the two groups. The scheme of interview is as follows: (the question should not be put to those marked with x

According to the reply given to question 15 of Part V

1. yes	2. no
"planner"	"non-planner"
15/a-15/d	x
16.	x

Questions 17-22 should be put to every respondent. Questions 23-24 of Part VI should also be put to every respondent. Question 25 of Part VII should be put to every respondent who was pregnant.

According to the reply given in question 26

1. yes	2. no
"planner"	"non-planner"
27/a - 27/j	x
x	28/a-28/f

Questions 29-32 should be put to every respondent.

Completion of Part V. of the Questionnaire
Family Planning

15. Planned number of children

Question 15 has to be put to each woman. Here it is asked whether the respondent had any idea about the size of her family or about the desired number of children before her first marriage or at the beginning of her married life. Additional questions 15/a, 15/d relate only to those who replied to this question in the affirmative, i. e. to women who plan the number of their children, (called family planners or planners). The interviewing of women answering in the negative, (non planners), should be continued with question 17.

Family planning

Family planning means, first of all, the predetermination of the desired number of children by the parents, based, as a rule, on ideas developed before the marriage or on informal agreements. The plans include, in general, not only the number of children but also the sequence of their births. It occurs frequently that the ideas on family planning are only developed or modified later after the birth of the first or subsequent child, owing closer acquaintance with the possibilities of family planning or under the impact of its necessity. On the basis of points a-d of question 15 of the questionnaire and for this very reason, not only the desired number of children of the woman interviewed should be asked but also whether she talked over this matter with her husband. The opinion of her husband and whether the woman had any idea about the sequence of her births should also be asked.

Number of children

In reply to questions 15/a, 18, 20, 21 and 22 the number of children planned, desired, thought as ideal etc. should be entered by means of figures. If the woman is undecided in her answer, for instance, if she desired two or three children, the interview should be continued to obtain a definite number, i. e. she desired two children. Uncertain answers must not be entered on the questionnaire.

16. Change in the plans

In reply to question 16, account should be given of the changes in the plans about the family size. Only those women are regarded as family planners who had

some idea about the number of their children at the time of their first marriage. Thus here only the change of the original plan should be indicated. Thus were a woman developed her ideas about the size of her family later for instance, after the birth of her second child, she is not considered a family planner for the purpose of this survey. Thus the possible change in the planned size of her family should therefore not be indicated. The replies to 16/a - in which year her opinion changed - should relate to her date of marriage.

If the woman had remarried and the plan drawn up at her first marriage had changed due to this circumstance, question 16 should be related to the change connected with remarrying; in reply to question 16/a it is not the date of her first marriage but that her opinion changed when marrying again which should be entered.

In point 16/b the direction in which her opinion changed and the reason for this should be asked. If the desired number of children increased, the answer should be given by indicating the preprinted possibilities, in case of answer 1 and 2 on the basis of the preprinted card. If the plan of a woman or married couple changes several times during the marriage, then in point 16 only the most characteristic change should be given i. e. in most cases that one which explains the difference between the original plan and the reply to question 18 about the number of children desired at the time of the survey.

17. Does the woman want to bear in the future?

Questions 17-24 and 26 should be put to all women interviewed. The woman may choose from among four answers can be given to question 17. In the case of an answer in the affirmative the estimated date of her next birth or the reason for the delay of her next birth should be entered; where the answer is conditional, the condition; in case of a negative answer the reason should be indicated on basis of the preprinted separate card.

In reply to this question the living children must not be entered; the number and sex of the children desired by the respondent in the future should be indicated.

Questions 19/a and 19/b should be answered only if the woman is pregnant, i. e. if she gives an answer to question 19 in the affirmative. By means of the next questions it is intended to learn what number of children is thought ideal by the woman not in her own concrete case, but, in general, for a healthy Hungarian family.

Question 20 differs from question 21 in that in the latter case it is intended to learn how many children the woman would have on the basis of her concrete experiences if she had the possibility of a new start.

Completion of Part VI of the Questionnaire
Fertility and Birth Control Data

23. History of pregnancy

In question 23 it is asked whether the woman was pregnant in the course of her life. If an answer in the affirmative is obtained the table relating to pregnancy should be completed about all pregnancies by chronological order. In the case of persons who had more than six pregnancies during their life time, one or more supplementary sheet should be used on which the listing can be continued. For women who were not yet pregnant the table under question 23 should be crossed out.

In connection with the individual pregnancies the following questions should be answered:

Did the woman apply prevention regularly before becoming pregnant? The answer should be given by marking the serial number with a circle. Similarly, the method of prevention applied before becoming pregnant should be indicated with marking the corresponding answer with a circle before the serial number.

By birth control the effort of individuals or spouses to influence the number of their descendents by applying methods based on the knowledge of the mechanism of conception is meant.

The methods of birth control either result in the fact that the sexual intercourse does not end with conception or break the process between conception and birth. The methods of hindering conception or pregnancy, more exactly, the application of similar means or methods, are called "prevention", whereas the interruption of pregnancy is called induced abortion.

The most detailed enumeration of the methods of prevention can be found in question 27/b. In reply to question 23, in the table of pregnancy history, only the most frequent methods of contraception are listed. In this case, too, the question has to be answered on the basis of the detailed list, and a non listed method of contraception should be indicated under 7 as "other methods". There it is enough to

enter the serial number indicated on the card; a text has to be given only if the method does not figure on the card. Also in reply to questions 28/a and 31 the serial numbers of the corresponding methods of prevention should be entered; in case of several methods the serial number of the chief method should be marked with a circle.

A separate bulletin gives detailed information on the methods of prevention.

In the next two columns the year and month of ending pregnancy as well as its duration should be entered; finally, also the outcome of the pregnancy also has to be indicated.

To those who are pregnant at the time of the survey all questions on pregnancy should be put, with the exception of the question on the outcome of the pregnancy, which - since pregnancy is not yet ended - should be crossed out.

A reply in the affirmative should be given to question 24 by those women who have an organic disease or another chronic disease influencing their family planning and fertility. Also in cases where the woman interviewed is not ill but her insufficient development or the location of her uterus etc., hinder her becoming pregnant this has to be indicated here. If the woman interviewed answers in the affirmative, the name of her disease or another factor hindering her pregnancy should be entered.

Completion of Part VII of the Questionnaire Birth Control: Prevention

25. Prevention before the last pregnancy

Question 25 is the repetition of one of the questions on prevention of the table relating to the fertility history mentioned in point 23. Here, however, an answer should be given to the question why the woman did not apply prevention or why she applied prevention irregularly, and in the latter case what caused her pregnancy.

26. Inquiry about prevention at the time of the survey

Question 26 should be put to each woman. Those who answer in the affirmative should be requested to reply also to questions 27/a-27/b. The interview-

ing of those who do not apply prevention, i. e. of those who replied to question 26 in the negative should be continued with question 28.

27. Attitude towards prevention

All women who applied prevention in the course of 1965, i. e. who used one of the methods or means listed in the information, have to reply to question 27.

In reply to subquestion 27/a the date of starting prevention should be entered. The year given here may also be a year preceding the year of ending the first pregnancy reported in the history of pregnancy in reply to question 23. The date of the first prevention should be indicated irrespective of the fact that the first method applied may be identical with that used at the time of the survey.

In reply to question 27/b the method of prevention used at the time of the survey should be indicated; moreover, by marking the corresponding symbols with a circle it should also be indicated whether the woman uses the method in question regularly (i. e. in case of each sexual intercourse), irregularly, accidentally or seldom.

If, in reply to subquestion 27/c, several methods of prevention are given by the woman it should be indicated whether they are used jointly, combined with each other or alternatively. Further, in reply to question 27/d, dealing with the most frequently used methods of prevention, the one thought to be the most effective method and regarded by the woman as her "chief method" should also be indicated. At the same time it should also be indicated here when the woman started applying this method. If several methods are given by the woman it should be indicated which of them she regards most efficient.

While subquestions 27/c and 27/f should be put only to those who indicated more than one method of prevention, subquestion 27/g has to be put to all women applying prevention because the woman might have applied one method of prevention after her last pregnancy which she substituted for another method later on, which she is applying at the time of the survey. In this case in reply to question 27/h the method applied earlier should be indicated and in reply to question 27/i the duration of its application (from what time to what time) should be given.

In reply to subquestion 27/j the reason for the present prevention is asked. For all practical purposes this corresponds with the reasons inducing the wo-

man to restrict the number of her deliveries. Since there are women who never realize the reasons which inducing them to apply birth control, it is intended to help them by means of a preprinted list of answers. This same method is used in the case of birth control methods when the nurse gives a card with prepared answers to the women and asks her to indicate the reason she regards most appropriate. Of course, several answers can be given to one question; in this case, however, it should also be indicated which she regards as the most important one. If the woman does not find an appropriate answer in the list, question 22 has to be marked with a circle and the reason given by the woman should be entered in the questionnaire. Just as in the case of subquestion 28/a, when replying to this subquestion the nurse performing the interview should be careful not to influence the woman interviewed in her reply. (This point of view relates, of course, to the completion of the whole questionnaire.)

28. Women who do not apply prevention

These questions should not be put to women applying birth control at the time of the survey; they are covered by question 27.

The women who apply no birth control at the time of the survey should be asked to give the reason for this. What has been said in connection with question 27/j holds true also in replying to subquestion 28/c. Question 28/c has to be answered only if the woman intends to use any of the methods of prevention in the future.

For women who apply no prevention at the time of the survey (i. e. in the year 1965) but who were pregnant and applied prevention after their last pregnancy (i. e. who replied to question 28/d in the affirmative) in reply to question 28/e the applied method of prevention should be indicated on basis of their replies given to question 27/b. On the other hand reply to subquestion 28/f the duration of applying prevention (from what time to what time) should be given.

29. Information on birth control

Beginning with question 29 the questions asked relate to women who do and who do not apply birth control.

In reply to question 29, the information obtained on birth control methods is regarded as primarily personal information. In this connection in reply to sub-

question 29/a, the person from whom the woman received the information should be indicated on the basis of the preprinted answers. Several sources of information received can be indicated. Question 29 has to be answered in the affirmative even if the woman did not receive the information personally but in a manner indicated in subquestion 29/b. Subquestion 29/c can be answered in the affirmative only if the woman is able to apply the method of prevention in connection with the information mentioned in subquestions 29/a or 29/b.

30. Induced abortion

The replies given to question 30 have to conform with the history of pregnancy outlined in question 23. Spontaneous abortions cannot be regarded as induced abortions. If the woman had induced abortions, subquestions 30/a and 30/b should also be answered. In reply to question 30/b only the serial number of the reply indicating the chief reason should be entered on the basis of the answers of Table 27/j. If the woman had several induced abortions, subquestions 30/a and 30/b should relate to the last induced abortion of the woman.

31. Induced abortion in the future

This question should be put also to those women who had no induced abortion before the survey.

32. Permitting induced abortion

This question should also be put to each woman. If the woman gives a positive answer to the question, but agrees only in part with the present system of permitting induced abortions, it is asked to describe briefly in which the woman's opinion differs.

Questions without a number

The woman interviewed should be asked if she is willing to reply to similar questions in the future and if she is willing to keep records about the methods and results of birth control for a longer time. Her answers should be indicated on the last page of the questionnaire, above the remarks of the nurse.

Finally, the nurse has to summarize her experiences on the completion of the questionnaire. She has to reply partly to the preprinted questions in the "Remarks of the Nurse", partly she has to enter her remarks either on the behaviour of the woman enumerated or on certain answers requiring explanation.

After the enumeration has been ended the questionnaire "Data of the Nurse Performing the Enumeration" should be completed. Its first part relates to the personal data of the nurse; its second side serves for summarizing of the enumeration experiences.

Information
on
the Methods of "Prevention" (Birth Control)
Vade-mecum to the Completion of Questions 23,
27/b-27/i, 28/d and 31

The original Hungarian text contains an accurate and detailed description of the different methods of prevention and their application as well as some remarks on their efficiency, while the translation includes only hints concerning the survey.

After posing the first question relating to prevention (birth control), the enumerator hands over a list of the methods of prevention to the woman interviewed in which the woman can find the method applied by her and will be able to indicate the serial number of the means or method used. In general, the list contains the methods to the extent of their spread.

Since people seldom speak frankly about birth control problems, no standard practice in the denomination of the different methods has been developed. It may occur that the woman cannot indicate the method used by her because her spouse knows it by another name or because it was possibly never named or was not regarded as a birth control method. Partly for this reason, partly because similar problems may arise also on the part of the interviewer, below information is given on the means and methods of prevention in the order in which they appear on the list.

1. Coitus interruptus (taking care). This is perhaps the oldest, simplest and - in Hungary - the most extensively used method of birth control. Its application depends on the man. For this very reason the woman may hold the opinion that she does not apply birth control. Our survey, however, is concerned with the methods of prevention of married couples, thus it is requested to indicate also the method used by the man (condom etc.). The attention of women should be directed to this circumstance in all cases.

2. Condom

3. Pessary (Diaphragm)

The means mentioned above are distinguished from those types of pessaries (cervical cap, ring) which are put in by a doctor or other person for a longer time.

4. Douche (irrigation, after the sexual intercourse). This method does not belong to the efficient methods of contraception; it is often an auxiliary method of prevention (for instance, after coitus interruptus, or after the use of condom, pessary). In fact, there are some who do not regard it as a method of prevention. Indeed, the possible washing after the sexual intercourse cannot be regarded as douche, but washing, if it includes also douche, should be entered even if it takes place only with water and is accompanied by another method of prevention.

5. Timidon or other jellies or creams (vaginal foam etc.). Jellies or creams are often used as auxiliary methods (for instance together with a pessary or condom, to smear them) but they can also be applied together with other methods, combined, for instance, with coitus interruptus, douche. Its application should be indicated on the questionnaire in all cases.

6. Rhythm method (calendar method, "infallible" period, Ogino-Knaus method).

7. Cervical cap (ring, and other such pessaries as are put in for a longer time.)

8. Tampon, sponge

9. Sexual abstinence (in case of those who do not live a married life). It includes separation in bed and the cessation or break of married life for a longer time. It should not be mistaken for the method described as periodical sexual abstinence in point 6.

10. Timidon tablets or other chemical contraceptives (foaming tablets, cocoa pills, etc.)

11. Oral pills (birth control tablets that can be swallowed, biological birth control).

12. Intrauterine devices (IUD).

13. Sterilization (through operation).

In case of sterilization it should be indicated whether it was the man or the woman who underwent the operation.

14. Others. All means, methods or ways of prevention that cannot be identified with those mentioned above should be indicated here. It is not enough to mark number 14 with a circle; the means, methods or ways should be named or described. Here the so-called iodine injection, i. e. the injection of iodine tincture into the womb which is noxious to health; the "carezza" or coitus reservatus (i. e. sexual intercourse without ejaculation, prolonged by means of "preserved", slackened motion) should be mentioned. Also the prolongation of the period of lactation should be indicated here (this is not regarded as a method of prevention in our country, though the probability of the conception is smaller during the period of lactation). The prolongation of the period of lactation should be ascertained on the basis of the replies given to question 14. Lactation lasting more than 9 months should be regarded as a prolonged lactation.

Abortion is not considered a method of prevention thus it should not be indicated here. There are separate questions in the questionnaire which relate to abortions.

Note: As it is clear from the above list all methods of contraception used by both parties should be asked.

CHAPTER 3

Sampling Selection and Errors in the TCS 66 Study

3.1 Selection of the TCS 66 Sample

The selection was performed in two stages; in the first stage the settlements to be included in the sample were selected; in the second the dwellings to be enumerated were designated. The selection took place by means of stratification. The stratification of the communes made it possible to decrease the number of settlements to be enumerated.

Table 3.1. Selection of the Settlements by Strata

Population size	Percentage of the population in agriculture 1.1. 1960	Number of communes (towns) 1.1. 1960	Settlements selected	
			Number	Percentage
- 499		601	18	3.0
500- 999		812	53	6.5
1 000-1 499	-40	92	5	5.4
	40-60	167	9	5.4
	60+	301	17	5.6
1 500-1 999	-40	72	6	8.3
	40-60	87	7	8.0
	60+	155	12	7.7
2 000-2 999	-40	99	12	12.1
	40-60	109	12	11.0
	60+	190	21	11.1
3 000-4 999	-40	87	15	17.2
	40-60	75	14	18.7
	60+	150	26	17.3
5 000+(communes) towns		212	105	49.5
		63	63	100.0
Total		3,273	395	12.1

The number of smaller settlements was significant, although only a small part of the population lived in them. Starting from these considerations and analysing in detail the composition of the settlements by population number the scope of the settlements to be included in the sample were determined. In this respect, first and foremost, the towns were taken into account. Since, however, there were many communes whose population surpassed the population number of some towns, and a significant part of these communes was highly differentiated, especially in respect of their occupational structure, the communes with more than 5 000 inhabitants were also considered towns. As a result, every town and every second commune with more than 5 000 inhabitants was selected. 0.5 per cent of the dwellings in towns and 1.0 per cent of the dwellings from the selected communes were sampled, thus a 0.5 per cent sample from all communes and towns with more than 5 000 inhabitants was ensured. This had the great advantage that in 5.2 per cent of the settlements, covering almost 60 per cent of the country's population, the dwellings could be selected systematically by settlement.

At the same time, communes with less than 5 000 inhabitants had to be differentiated in order to avoid a shift in the sample due to the difference between the communes, which could possibly lead to a false representation.

The 14 categories then determined in which the primary criterion was the grouping by population number, the secondary criterion the proportion of the agricultural population ensured a true representation in the sample. The increase in the number of the categories did not involve an increase in the number of communes selected; it caused extra computation work only.

Table 3.2. Selection of the Dwellings by Strata on Basis of the Population Census of 1960

Population size	Percentage of the population in agriculture 1.1.1960	Number of dwelling units 1.1.1960	Dwelling units selected	
			Number	Percentage
- 499		54,164	271	0.5
500- 999		158,180	791	0.5
	-40	31,252	156	0.5
1 000-1 499	40-60	53,459	267	0.5
	60+	98,779	494	0.5
	-40	33,476	168	0.5
1 500-1 999	40-60	39,840	199	0.5
	60+	72,628	363	0.5
	-40	67,112	336	0.5
2 000-2 999	40-60	70,882	354	0.5
	60+	127,648	638	0.5
	-40	93,560	468	0.5
3 000-4 999	40-60	79,864	399	0.5
	60+	157,651	788	0.5
5 000+		1,649,587	8,248	0.5
Total		2,788,082	13,940	0.5

It followed from the nature of the selection that the addresses of the dwellings included in the study were to be found within the settlements. It was, therefore, clear that the enumerators had to go over a large area to perform their task. It was also clear that the time of their participation was limited. On the basis of the results of the pilot survey it was decided to sample 30 dwellings in the case of settlements with more than 1 000 inhabitants. With communes of less than 1 000 inhabitants this number would not have ensured a proper representation in the sample, and for them the size of the enumeration districts was reduced to 15 dwellings.

3.2 Sampling Errors

It is obvious that the size of the sampling data or the proportion in the sample of the persons with given characteristics contain a certain "sampling error"; this random error can be attributed to the sampling procedure itself since the present study covers only a smaller part of the population selected at random. It is perhaps needless to say that the random error does not measure the size of actual error of estimates; it measures only one of its components, the "random component". By means of the standard error calculated from the sampling variance, a so-called confidence interval can be constructed around the sampling data, into which the actual value for the total population, estimated by sampling, falls with a certain degree of confidence. In our studies 95 per cent was taken as the confidence level; which means that out of 100 estimated data for the total population at least 95 fall within the given confidence limits. The length of the confidence interval depends, of course, upon the level of confidence applied. In the case of the above 95 per cent confidence limit, the half length of the interval is (roughly calculated) double of the standard error and the end points of the interval are given by the estimated sampling value plus or minus the double standard error.

The size of the "standard error" of the number or the proportion of those with a given characteristic depends, above all, upon the size of that sample or sub-sample respectively, from which the proportion in question is calculated. Approximately it can be said (in case of simple random sampling) that the sampling error is in inverse ratio to the square root of the sample size. On the other hand, proportions calculated from sub-samples of different size will have different sampling errors. Thus, for instance, the standard error of the same proportion,

calculated from a small sub-sample, will be much greater than if it were calculated from the complete sample. Furthermore, the size of the sampling error also changes according to the size of the sampling data and sampling proportions. Greater sampling values or proportions reveal, in general, a higher standard error, but inversely, the relative standard error of greater sampling values or proportions (comparing this error to the sampling error or proportion) is lower. The value of the relative standard error reaches its minimum at the sampling proportions of about 50 per cent.

Finally, the size of the sampling errors depends greatly upon the sampling procedure applied, or more exactly, upon the structure of the considered sample. In our case the sample was selected in two stages; in the first stage settlements, in the second dwellings (and automatically all the eligible interviewers living in them) were selected. This procedure increases somewhat (as compared to the simple random sample) the size of the errors of the sampling data since the sample consists of groups of dwellings (in different settlements) and of groups of persons interviewed (possibly of several such persons living in a settlement). This cluster-effect is due to the fact that, in general, the characteristics (in respect of the attitude towards family planning, for instance) of several persons interviewed living in the same dwelling are not independent of one another. In this way the interviews following the first no longer contain as much information as can be obtained when the same number of independent persons are interviewed. In our case, however, this cluster effect may be very minimal as more than one observation was performed in only a few cases.

On the other hand, in the first stage of sampling, the primary sampling units were selected from the stratified sample of settlements and the sampling units were allocated among the strata proportionate to their size. This stratification favourably influences the size of the standard error of the sampling data. In such cases one of the components - connected with the variance within the strata - of the sampling error (which consists partly of the variance within the strata of those with a given characteristic and partly of the variance among the strata) is smaller than in case of simple random selection. This applies, first of all, to characteristics correlated with the stratification variables, for in such cases the population of the persons interviewed is relatively homogeneous within the strata and their variance is also smaller. The standard error of estimate (\bar{y}) from a stratified random sample can be calculated in the following way. Let us

denote with the observed value y_{hi} for the i^{th} person interviewed in the h^{th} stratum (where $h = 1, 2, \dots, L$; L being the total number of the strata) and \bar{y}_h is the sampling average of these observations in the h^{th} stratum, i. e.

$$\bar{y}_h = \frac{1}{n_h} \sum_{i_h} y_{hi}'$$

where n_h is the number of the units of observation in the h^{th} stratum and $n = \sum_h n_h$ is the total number of the sampling units. s_h^2 will give an unbiased estimate of the variance for the basic population within the stratum, i. e. :

$$s_h^2 = \frac{1}{n_h - 1} \sum (y_{hi} - \bar{y}_h)^2$$

If N_h denotes the complete number of units of the basic population in the h^{th} stratum ($\sum_h N_h = N$ is, the total number of units, when the values $W_h = N_h/N$ are the stratum weights, then

$$\bar{y} = \sum_h W_h \bar{y}_h$$

is the estimate of the mean value for one unit.

If - as in our case - the equality

$$\frac{n_h}{n} = \frac{N_h}{N}$$

holds, then the unbiased estimate of variance of \bar{y} will be given by the expression

$$s^2(\bar{y}) = \frac{1}{N^2} \sum_h N_h (N_h - n_h) \frac{s_h^2}{n_h}$$

from which the confidence limits of the average will be given by the values

$$\bar{y} \pm ts(\bar{y}).$$

In our case $t = 1,96$, according to the fixed 95 per cent confidence level. If we want to estimate the error of the proportion p of those with a certain characteristics, which proportion is equal to p_h in the h^{th} stratum (and $q_h = 1 - p_h$), then, from the above formulae we obtain

$$s^2(p) = \frac{1}{N^2} \sum_h \frac{N_h^2 (N_h - n_h)}{N_h - 1} \frac{p_h q_h}{n_h - 1}$$

and furthermore, the confidence limits of the estimation are

$$p \pm ts(p)$$

(In these formulae the above mentioned "cluster" effect was disregarded).

Since stratification influences the accuracy of the estimates of the various items in a different way, the confidence limits were estimated by a simplified method. Here we did not take into account the impacts of stratification and obtained thus an upper (pessimistic) estimate of the standard error of the estimates. Accordingly, we approximate the standard error of average \bar{y} by the expression

$$S^2(\bar{y}) = \frac{1}{n(n-1)} \sum_i (\bar{y}_i - \bar{y})^2 \left(1 - \frac{n}{N} \approx \frac{1}{n(n-1)} \sum_i (y_i - \bar{y})^2\right)$$

in which, due to small sample size, the factor $(1 - \frac{n}{N}) \approx 1$ can be neglected. Similarly, an upper estimate of the sampling error of p is given by

$$s^2(p) = \frac{1}{n-1} pq \left(1 - \frac{n}{N}\right) \approx \frac{1}{n-1} pq$$

where - as above - the factor $(1 - \frac{n}{N})$ is neglectable. (Instead of the above estimate the $\frac{pq}{n}$ expression is often used in practice which, however, does not give unbiased estimates even for infinite populations.)

Table 3.3.A Approximate Sampling Error and Confidence Intervals
of TCS-66 Study

A. n = 8 800, 5 000, 2 000, 1 000

Sampling values (K)	Number of interviews (n)								
	8 800		5 000		2 000		1 000		
	Confidence interval	Relative standard error (%)	Confidence interval	Relative standard error (%)	Confidence interval	Relative standard error (%)	Confidence interval	Relative standard error (%)	
4,000	3,908-4,092	2.29	3,945-4,055	1.39					
3,000	2,913-3,087	2.91	2,932-3,068	2.26					
2,500	2,417-2,583	3.32	2,431-2,569	2.77					
2,000	1,923-2,077	3.85	1,932-2,068	3.39					
1,500	1,431-1,569	4.61	1,436-1,564	4.23	1,462-1,538	2.53			
1,000	942-1,058	5.84	945-1,055	5.54	956-1,044	4.38			
800	747- 853	6.61	749- 851	6.35	757- 843	5.37	775-825	3.10	
600	554- 646	7.72	555- 645	7.51	560- 640	6.69	570-630	5.06	
500	457- 543	8.51	458- 542	8.32	462- 538	7.59	469-531	6.20	
400	362- 438	9.57	362- 438	9.40	365- 435	8.77	370-430	7.59	
300	267- 333	11.12	267- 333	10.97	269- 331	10.43	272-328	9.47	
200	173- 227	13.70	173- 227	13.58	174- 226	13.15	175-225	12.40	
100	81- 119	19.49	81- 119	19.40	81- 119	19.10	81-119	18.59	
75	58- 92	22.54	58- 92	22.46	58- 92	22.20	59- 91	21.77	
50	36- 64	27.64	36- 64	27.58	36- 64	27.37	36- 64	27.02	
25	15- 35	39.15	15- 35	39.10	15- 35	38.95	15- 35	38.71	

Table 3.3. B Approximate Sampling Error and Confidence Intervals
of TCS 66 Study

B.n = 750, 500, 250, 100

Sampling values (K)	Number of interviews (n)								
	750		500		250		100		
	Confidence interval	Relative standard error (%)	Confidence interval	Relative standard error (%)	Confidence interval	Relative standard error (%)	Confidence interval	Relative standard error (%)	
600	579-621	3.58							
500	475-525	5.06							
400	373-427	6.70	382-418	4.38					
300	274-326	8.77	279-321	7.16					
200	176-224	11.87	179-221	10.74	188-212	6.20			
100	82-118	18.25	82-118	17.53	85-115	15.18			
75	59- 91	21.47	59- 91	20.87	61- 89	18.94	67-83	11.32	
50	37- 63	26.78	37- 63	26.30	38- 62	24.79	40-60	19.60	
25	15- 35	38.54	15- 35	38.21	16- 34	37.19	17-33	33.95	

CHAPTER 4
Survey Field Experiences from the TCS 66 Study,*
by Dr. Egon Szabady

4.1 Selection, Training and Field Work of the Interviewers

The selection of proper interviewers is one of the crucial problems of data collection. The successful performance of the survey depends greatly on the work of the interviewers (enumerators), and the quality of this work depends - beyond the personal conditions - on their training and also on their direction and control during the survey. In family planning surveys only persons trained or at least versed in family planning and relevant health problems, maintaining a close connection with the population and enjoying its confidence, can be expected to cooperate with success. According to our earlier experiences and the international practice, physicians are the persons meeting these requirements best; first of all, obstetrician-gynaecologists, who, however, could not be taken into account as interviewers due to the pressure and regional centralization of their work. Still, the cooperation of the head obstetrician-gynaecologists of the counties in the survey proved to be useful.

Although men (e. g. physicians) were also allowed to participate in family planning surveys as interviewers, it seemed to be more expedient to employ females as interviewers as the survey covered women. Our earlier experiences (relating to the fertility program of the 1963 microcensus) showed that women were less communicative towards male enumerators even in the least important family planning problems. This is why the participation of teachers had to be

* Chapter 4 is an abridged and modified version of the paper "Some Questions of Family Planning Studies" of the author published in No. 2, 1967 of "Demográfia" (pp. 219-237).

disregarded, though most of them proved to be good enumerators, and useful collaborators in numerous statistical surveys. At national surveys it is undoubtedly very advantageous if the enumerators are members of the same organization, if they are, for instance, teachers. But it is a disadvantage at family planning surveys if the type of activity of the organization to which the interviewers belong is far from the problems studied.

Under the given conditions, from among the available possibilities, the network of maternity care seemed to be most suited for this work, thus, in agreement with the Ministry of Health, nurses were requested to co-operate. Out of the 3 000 nurses working in the country, the 669 interviewers (enumerators) were selected by the head nurses in conformity with the special conditions of the sample design, taking into account the requirement that, if possible, each nurse should perform interviews in her own district. The appointment of the nurses was approved by the head obstetrician-gynaecologist of the counties.

As far as possible, the nurses made the interviews in their own place of residence and, as a rule, in their own district; only 3 per cent of them had to carry out the enumeration in an other settlement. This organization was advantageous from two points of view: on the one hand, the nurse was well-known in her enumeration district, she was welcomed, and, due to her profession, enjoyed general confidence (this last was a great advantage mostly in villages, while in towns, first of all, in Budapest, in many cases it was indifferent which nurse performed the interview; on the other hand, familiarity made it possible for the nurse to control some data from her own register.

Nurses did not form at all a homogenous group. They all completed a nurse training course of several years, but their previous education was varied. Most of them had taken their final examination at a secondary school or at a teacher's training institute, one third of them had a lower school attainment (most of them completed eight grades of the primary school). Their age and thus the time of their service and experience as well as their marital status, number of children etc., varied greatly.

When selecting the nurses the problem arose with good reason whether young girls or older mothers with many children should be selected to make the interviews; more exactly, considering the basic task of the interviewers the question arose; who could be expected to make a good data collector. Since at last

no excluding criterion was given relating to the selection of interviewers, the earlier working experience of the nurses selecting the interviewers as well as the local circumstances alone were decisive. However, on basis of the reports collected from the interviewers at the survey, a subsequent control of their fitness for data collection is possible.

The fitness for data collection is evaluated partly by the subjective answer in the interviewers' report as to how the respondents received the interviewers and if the respondents were communicative or not. In general, the data suppliers were assumed to answer more willingly to good interviewers and to become more communicative during the conversation.

Table 4.1. Attitude of the Respondents by Age of the Interviewers
(as percentage of the interviewers)

Year of birth of the interviewer	By the subjective opinion of the interviewer out of the respondents		
	less than 70 %	70-89 per cent	more than 90 %
		were willing to reply	
1941 - 1945	7,4	25,2	67,4
1936 - 1940	8,0	18,6	73,4
1931 - 1935	3,3	24,6	72,1
1926 - 1930	4,4	14,4	81,2
1921 - 1925	1,4	14,3	84,3
1916 - 1920	2,6	15,4	82,0
before 1916	2,4	12,6	85,0
Total	4,9	19,1	76,0
		were communicative	
1941 - 1945	20,0	39,3	40,7
1936 - 1940	17,2	31,1	51,7
1931 - 1935	9,3	39,0	51,7
1926 - 1930	10,2	21,7	68,1
1921 - 1925	8,5	28,6	62,9
1916 - 1920	12,8	23,1	64,1
before 1916	8,1	19,5	72,4
Total	13,3	30,9	55,8

From Table 4.1 it can be concluded that the women visited were almost just as willing to answer to young interviewers - in their opinion - as to older ones, but fewer were communicative towards them. This permits to conclude that the experience a nurse gains after a certain practice is very useful in making interviews. It seems, furthermore, that also young nurses possessing good qualities for making interviews were able to create the atmosphere required by the inquiry, the older persons interviewed were, however, embarrassed to a certain extent by the young age of the interviewer and this could not always be counterbalanced by her profession.

The reserve displayed against the young, may be due to the fact that most of them were still unmarried. This assumption, however, cannot be proved by a study of the reaction of the respondents by the marital status of the interviewers. (See Table 4.2.)

Though there are differences between the data obtained by unmarried and married interviewers, they are smaller than those which can be experienced in respect to their age. Therefore the possibility cannot be precluded that the married or unmarried state can influence the attitude of the interviewers. There is no doubt, however, that age has a greater influence, and the greater confidence in a married woman is more the consequence of the fact that married interviewers belong to older age-groups. The number of widowed and divorced interviewers was so small that the data obtained by them can be neglected.

It can be regarded as a sign of confidence in interviewers that almost two-thirds of the nurses (in 1,754 cases) were asked to give information on the methods of contraception. Naturally, the smallest number of those asking for information (13.0 per cent of the interviewed persons) could be found in Budapest, somewhat more in other towns (15.4 per cent) and the highest number in rural areas where each fifth person interviewed (19.2 per cent) asked for advice. It is surprising that on the basis of this objective criterion no difference can be made between the categories of interviewers.

From Table 4.3 it is clear that information concerning contraception was asked to the same extent from nurses who were working for many years on the place of interview as from those who were working there for only a few years. Though contraception is a confidential topic of conversation the persons interviewed

Table 4.2. Attitude of the Respondents according to the Marital Status of the Interviewers (as percentage of the interviewers)

Marital status of the interviewer	By the subjective opinion of the interviewer out of the respondents		
	less than 70 %	70-89 per cent	more than 90 %

were willing to reply

Single	4.3	22.1	73.6
Married	4.7	17.9	77.4
Widowed	14.4	7.2	78.4
Divorced	11.2	16.7	72.1
Total	4.9	19.2	75.9

were communicative

Single	15.3	34.4	50.3
Married	12.2	29.6	58.2
Widowed	14.3	7.1	78.6
Divorced	11.1	33.3	55.6
Total	13.3	30.9	55.8

felt confidence also towards young nurses working only for a short time on the place of enumeration, provided that the interviewer was also otherwise suited to make interviews. In this respect, too, the middle-aged nurses working for 5-10 years in the district seemed to be most suited, while of the oldest who were already working in the area before 1950 less were consulted than the young nurses who had worked there only for a few years or for a few months.

Indirect conclusions can be drawn also from the last three columns of the table as to how the population received the nurses. The young persons working in the district for a few years only, seem to have been much more enterprising than their older colleagues; probably they gained bad experiences only exceptionally. This is also shown by the fact that much fewer of them refused to participate

Table 4. 3. Consultation about Contraception and Attitude of the Interviewers after the Survey (as percentage of the interviewers)

Since when has the interviewer worked in the district?	From the interviewer information		Total	The interviewer would undertake a similar new survey		
	was asked for	was not asked for		willingly	unwillingly	not at all
1965	64	36	100	81	14	5
1963-1964	63	37	100	82	12	6
1960-1962	67	33	100	77	14	9
1955-1959	68	32	100	74	17	9
1950-1954	63	37	100	77	12	11
before 1950	54	46	100	79	9	12
Total	63	37	100	77	14	9

in a similar work, and more than four-fifths of them were willing to do work of this type in the future. The regional distribution of the answers shows, however, significant differences. In Budapest only 39 per cent of the nurses answered that they would like to participate in a similar survey, while in other towns the same percentage was 72, in villages 89. The difference is even greater by considering that 37 per cent of the interviewers in Budapest refused to undertake similar work in the future and the same percentage of nurses in other towns was only 9, in villages only 3. This phenomenon may be evaluated only when the willingness of the population to reply - what is worse in Budapest than in the country - is known. The question arises whether many nurses in Budapest do not want to participate in a similar survey because they are less interested personally either in getting acquainted with the circumstances of the district, or in earning a low income with this work, or because the Budapest population did not receive them willingly in many places and consequently they had bad experience. The lack of interest on the part of the Budapest interviewers was caused probably by both factors or by their interaction. It must be mentioned that in many respects the worst field work was done in Budapest (on account of the difficulty of finding the respondent at home, establishing the proper circumstances for the inquiry, unfamiliarity etc.), though similar difficulties occurred also in the country-side (e. g. interviewing on farms, fighting down distrust ect.).

234 nurses from the provinces assisted those in the centre to train the interviewers and to direct and control their work. Training and control was performed by 34 female employes of the Department of Population and Social Statistics of the Central Statistical Office who had experience in statistical field work. The training of the interviewers took place in smaller groups by regional units (counties) in a full time course. The regional experts received a one day training in the Central Statistical Office earlier. The training might have been unsatisfactory if the great majority of the interviewers had had no practice in completing different questionnaires and no experience in interviewing. Since, on the whole, the selected nurses possessed this general knowledge, their training could be limited to the teaching of specialist knowledge. The training and activity of the nurses was facilitated considerably - as well as uniformity ensured - by a detailed instruction booklet of 34 pages, handed over to each interviewer and inspector. The work of the experts versed in collecting statistical data proved to be useful in controlling the interviewers' work during the survey. Besides, the work of those interviewers who had obtained experience in statistical enumeration earlier did not differ significantly from the work of those who did not take part in a work of this type previously (the educational level of the participants did not play an important role); in the training of the personnel care had to be taken that any practice obtained at earlier surveys should not influence the survey.

4.2 Willingness to Answer

The willingness of the population to answer can be characterized by the same criteria as in the case of the interviewers. On this basis it can be stated that, in general, the population received the interviewers willingly and proved to be communicative in family planning questions as well. The attitude of the metropolitan, urban and rural population differed, however, characteristically in several respects; this had to be taken into account in the training of the interviewers. When examining the willingness of the population to answer, the most conspicuous difference between the population living in the capital and in the provinces was that people in the capital were much less communicative than people in the provinces.

Table 4.4. Attitude of the Respondents by Groups of Settlements
(as percentage of the interviewers)

Group of settlements	By the subjective opinion of the interviewers out of the respondents			
	less than 70 %	70-89 %	90-99 %	100 %
	were willing to reply			
Budapest	7.8	22.2	31.1	38.9
Other towns	3.6	17.2	10.4	68.8
Villages	4.9	19.4	15.2	60.5
Total	4.9	19.1	16.0	60.0
	were communicative			
Budapest	15.6	35.5	22.2	26.7
Other towns	14.6	27.1	13.0	45.3
Villages	12.1	31.8	12.7	43.4
Total	13.3	30.9	14.1	41.7

Those interviewers to whom the respondents answered willingly or towards whom they were communicative are shown separately in Table 5.4. It is striking that in Budapest, out of 10 respondents, nearly one third of the cases there was always one who did not answer willingly and there were always two or three who were not communicative. It is also clear from the table that our metropolitan population, though its majority did not show a negative behaviour, was much more reserved than the population living in the provinces, where the majority of the nurses met only respondents who were communicative and willing to reply.

4.3 Non-Response and Omission

The problem of non-responses and omissions can be discussed together with the willingness of the population to reply. Before starting the TCS 66 Study - on the basis of the experiences of the pilot survey - reserve addresses, too, were selected to replace non-responses and omissions. The necessity of this was justified by the results of the survey because mainly in Budapest and in bigger towns, in many cases, the interviewers could not establish any connection with the female living in the dwelling selected. The number of the dwellings selected amounted to 14 704; on this basis in December, 1965, 8 351 case studies were included in the sample, i. e. by 449 less than 0.5 per cent of the number of the 15-49 year old married females, estimated on the basis of the continuous registration of the population (this number would have amounted to 8 800). In 562 cases the interviewers could not establish any connection with the female living in the dwelling, or the dwelling was demolished in the meantime. The sample was completed and the survey was ended in January, 1966, when in Budapest, where the omissions were more frequent and also the rate of non-response highest, 660 new addresses, and in the countryside 231 new addresses were visited; on this basis 450 and 160 new case studies were prepared. In the list of the addresses visited in January, the persons omitted were included again, and they amounted to about 250. From among the persons omitted, some 150 could be found and interviewed at last as a result of repeated visits; they were included in the original sample. (In Budapest from among 124 addresses selected for repeated visit, data could be collected from 77 females omitted in January. But there were also persons who could not be found in their home even in January due to their absence stay abroad, hospital treatment etc.).

Aside from the omissions there were also 84 cases when the interviewers found the person selected for interview at home, still, for some reason, the interview could not take place. In 10 cases the interview could not be carried out owing to mental deficiency, chronic alcoholism, mental disorder, or other grave illness, etc. selected. Non-response was registered in 74 cases only (or 0.8 per cent of the persons interviewed). Omissions and non-responses (taken together amounted to 2 per cent of the original sample) were replaced similarly from the reserve material selected at random, taking the parameters of the population into account.

The 0.8 per cent ratio of non-response is low on the international level, too, and its distorting effect on the sample can be neglected by all means.

The ratio of non-response was higher in Budapest and lower in the villages than expected. As far as age was concerned, there were hardly any young females in the propagative age group who refused to reply; non-response occurred more frequently among the older.

Incorrect answers, (oblivions, denials) may distort the sample even more than non-responses and omissions. They appear in all studies of a similar type and special care should be devoted to their elimination in the stage of interviewing, processing and analysis. In our TCS 66 Study, in the course of the training, the interviewers were instructed how to eliminate the sources of the most frequent errors and oblivions (e. g. with regard to the methods of contraception, how to inquire about coitus interruptus or the means used by men, or about the method of revealing the pregnancy-history etc.) as a control of the sample, the parameters of the sample and the distributions of the answers were compared with other available statistical data. Thus the distribution of the females in the sample was compared with the marital status and age data of the continuous population register, with the fertility data of the microcensus of 1963 and with the available occupational data; the birth control data was compared with the sales data of the birth control devices; the pregnancy history was compared with the data of birth and abortion statistics, etc. All these comparisons have shown that apart from insignificant and unavoidable oblivions and incorrect answers, practically all the answers can be regarded as unbiased. There are two exceptions to this. One of them is the personal income leading to dubious answers at every survey; its use as a differential criterion in the TCS 66 Study should make one cautious. The other essential problem is the denial of induced abortions.

Table 4.5. Non-respondents by Age,
Residence and Socio-economic Group

Residence and age	Total	Earners			Dependants		
		non- manual	manual	together	non- manual	manual	together

numbers

Budapest	27	11	10	21	4	2	6
Other towns	17	7	6	13	-	4	4
Villages	30	4	9	13	4	13	17
Total	74	22	25	47	8	19	27
15-29 years	7	2	2	4	1	2	3
30-39 "	36	12	13	25	5	6	11
40-49 "	31	8	10	18	2	11	13
Total	74	22	25	47	8	19	27

percentage

Budapest	36.5	50.0	40.0	44.6	50.0	10.5	22.2
Other towns	23.0	31.8	24.0	27.7	-	21.1	14.8
Villages	40.5	18.2	36.0	27.7	50.0	68.4	63.0
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0
15-29 years	9.5	9.1	8.0	8.5	12.5	10.6	11.1
30-39 "	48.6	54.5	52.0	53.2	62.5	31.5	40.7
40-49 "	41.9	36.4	40.0	38.3	25.0	57.9	48.2
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0

CHAPTER 5
Some Problems in the Reconstruction
of Complete Fertility History*
by Dr. György Acsódi

An important question in studies concerning fertility and human reproduction is the reconstruction of fertility history. This is why special fertility studies, the so-called K. A. P. studies,¹ - destined to reveal family planning knowledge, the attitude towards family planning as well as birth control practice, are based upon questions which make it possible to reconstruct the complete pregnancy history or at least the birth history of a woman. The importance of pregnancy history is demonstrated by the fact that the Committee on Comparative Studies of Fertility and Family Planning of the International Union for the Scientific Study of Population, also included these questions in its recommendations² and suggestion about it was put on the agenda of the 14th meeting, in 1967 of the Population Commission of the United Nations Economic and Social Council.³

The retrospective reconstruction of pregnancy history often encounters difficulties which vary by countries and depend not only on the characteristic features of the person interviewed but also on the events themselves inquired

* Chapter 5 was originally prepared as a paper to be published in a Memorial Volume.

¹ Some of the studies of this type, carried out recently in Ghana, Hungary, Latin America, Malaysia, Morocco, the United Arab Republic, Taiwan, Turkey and the United States of America, are reviewed in the publication Selected Questionnaires on Knowledge, Attitude and Practice of Family Planning, Vol. I-II., The Population Council, New York, 1967.

² Variables for Comparative Fertility Studies, a Working Paper. Prepared by The Committee on Comparative Studies of Fertility and Family Planning of The International Union for the Scientific Study of Population. Ann Arbor, Mich. 1967. p. 36.

³ United Nations, Economic and Social Council. Variables for Comparative Fertility Studies. E/CN. 9/212. 1967.

about in pregnancy history studies. In the following, the problems of the reconstruction of pregnancy history will be discussed according to the following four groups:

1. some problems of birth history,
2. unregistered terminations of conception,
3. abortions,
4. sterility.

To illustrate these problems the data of the Hungarian fertility, family planning and birth control study of 1965-1966, the so-called TCS 66 Study⁴, will be used.

⁴ Szabady, E., Klinger, A. and Acsádi G.: The Hungarian Fertility and Family Planning Study of 1965-1966. Preventive Medicine and Family Planning. Proceedings, Fifth Conference of the Europe and Near East Region of the I. P. P. F. Copenhagen 5-8 July, 1966. Hertford, 1967. 265-274. p.

5.1 Birth History

In both the developing and the developed countries, the most difficult thing to reconstruct among the events of the complete pregnancy history is pregnancy wastage. This is why the "Variables"⁵, prepared by the said Commission, suggest that "birth history" be asked where the resources do not permit, and the complete pregnancy history, where they do. The "Variables" are as follows:

"5. A birth history, with information about each live birth as follows:

- a. Birth order; first, second, etc.
- b. Sex
- c. Present location of child, whether living with mother, living elsewhere, or dead
- d. If child is not alive, whether age at death was under one year, one to five years, or older
- e. Intervals between births, preferably obtained from the date of each birth and date of first marriage
- f. The "open" birth interval - that is, the interval in months since the last live birth".

⁵ Variables for Comparative Fertility Studies, p. 8-9.

In connection with foetal deaths errors may arise due to the fact that in marriages of longer duration the respondent may forget about earlier foetal deaths, or, being ashamed of them, possibly for fear of the consequences of reporting them (for instance, in case of illegal abortion) she may deny them. By omitting these sources of error the questioning of birth history means that an important body of information is lost. At the same time, by the aid of other criteria a number of other important ratios can be obtained in addition to the number of live births. Thus, for instance, on the basis of birth history, the survival ratios for children, the age-specific and age-cumulative birth rates, the duration-specific and duration-cumulative birth rates, the total and crude fertility rates, the birth rates for the preceding year, etc., can be calculated.

Point c. of the suggested survey technique is meant to facilitate obtaining the necessary information and to improve the accuracy of the answers received. Really, it does not seem expedient to ask the birth history directly (i. e. how many children were born to the person interviewed and when). It should be asked indirectly, by inquiring about the living children. A further aid to the memory is to call attention to the children living elsewhere, who have left the family. The answer to question how many children died makes the birth history complete. In connection with the already non-living children, special attention should be paid of course to those who died shortly after birth.

The above described technique of questioning can be recommended not only in developing countries but also in of developed countries, while its application may also be useful at population censuses when questions on fertility are put. Since there are less developed population groups in developed countries, too, it may useful to define the questions accurately even in case of educated respondents. The question on the number of live-births of the respondent will presumably be answered with some error in case of both the children who died early and those who left the family in the meantime.

The experience of the Hungarian TCS 66 Study show that there are two further aspects of the birth history to which attention should be drawn. One is that when reconstructing birth histories it is expedient to take into account late foetal deaths, i. e. still-births. The other concerns the number of children being brought up in the family, which is not necessarily identical with the number of children living with the mother. Information can be obtained about the size of the different categories of children from Table 5.1.

Table 5.1. Age-Specific Data of Birth History

Age (years)	Number of children			
	Still-births	Live-births	Living	Being brought up in the family
	in the sample			
15-19	1	74	69	70
20-24	11	1,051	1,019	1,022
25-29	46	2,306	2,206	2,215
30-34	57	3,212	3,037	3,017
35-39	73	3,692	3,444	3,112
40-44	91	3,838	3,494	2,295
45-49	63	2,468	2,224	936
Total	342	16,641	15,493	12,667
	on the average per female			
15-19	0.01	0.47	0.44	0.45
20-24	0.01	0.97	0.94	0.94
25-29	0.03	1.53	1.46	1.47
30-34	0.04	1.98	1.87	1.86
35-39	0.04	2.14	2.00	1.81
40-44	0.06	2.33	2.12	1.39
45-49	0.06	2.33	2.10	0.88
Total	0.04	1.89	1.76	1.44

In countries with an advanced health system the number of still-births⁶ is insignificant. Compared with the total number of live-births it was only 20.1 %o even in the samples of the TCS 66 Study. According to current Hungarian vital statistics⁷ the proportion of still-births has been only 11-12 %o in the last years, while after World War I their proportion was still close to 30 %o. In the developing countries this amounts to 30-50 %o or even above today.⁸

⁶ "Stillbirth is defined as synonymous with late foetal death, that is, one of twenty-eight completed weeks of gestation or over." Principles for a Vital Statistics System. Statistical Papers, Series M. No 19. United Nations, New York, 1964. p. 7.

⁷ Demográfiai Évkönyv, 1966. Magyarország népesedése. (Demographic Yearbook, 1966. The Population of Hungary) Központi Statisztikai Hivatal, Budapest, 1967, pp. 80-81.

⁸ Demographic Yearbook, 1966, United Nations, New York, 1967, pp. 242-248.

In connection with still-births it should be noted that theoretically in the recommendations of WHO and of United Nations the concepts "live-birth" and "foetal death" are defined, rather satisfactorily, but the practice in this field is not uniform even to-day.⁹ There are considerable differences not only by regions¹⁰ but even within different countries. In many countries part of the live-births are considered foetal deaths. It can be assumed that illiterate respondents will consider their children who died shortly after birth as still-births and it is not probable that they will regard foetuses born from pregnancies shorter than 28 weeks as live-births, even if they show us sign of life. Since the rate of infant mortality is often considered a characteristic index of the level of public health the possibility may also arise that some will try to decrease the value of this rate by regarding deaths shortly after birth, as foetal deaths. In Hungary, however, where newborn are registered in accordance with the recommendations of WHO, there exists rather the suspicion that foetal deaths are reported sometimes as live-births. (A live-birth offers a number of financial advantages to the mother which could not be obtained in case of still-births. - In 1966, infants with a weight less than 1 500 grams amounted to 1.8 per cent of the live-births and accounted for 37.9 per cent of infant deaths, the majority of whom hold for less than 24 hours¹¹). This refers to the fact that it is justifiable to include also still-births in the study of birth history. The classical study of fertility was restricted only to live-births, mainly because still-births do not play a role in reproduction. In practice however, birth statistics have been covering still-births from the beginning in the developed countries.

The last column of Table 5.1, the number of children being brought up in the family, shows in essence the number of children living with the mother. The number of children living with the mother in the reproductive age corresponds, in general, with the number of living children; over the age of 34 years, however, the average number per woman decreases quickly due to growing up and leaving the family. More than half of the children of women aged between 45-49 years left

⁹ Definition of Stillbirth; 84 geographic areas, as of 1 January 1950. In: Handbook of Vital Statistics Methods. Studies in Methods, Series F, No. 7, United Nations, New York, 1955, p. 230-236.

¹⁰ Acsádi, György: A népmozgalmi statisztikák egységesítésének kérdése a KGST országok szakértői munkacsoportjának budapesti ülésén. (The Problems of the International Standardization of Vital Statistics at the Budapest Session of the Working Group of Experts of the COMECON Countries. Summaries in English and Russian) Demográfia, 7, 1964, p. 266-284.

¹¹ Demográfiai Évkönyv, 1966, p. 98, 199.

the family. This process which in some societies starts even earlier and develop even quicker makes it necessary to ask the number of children living elsewhere (not with the mother).

It is remarkable that in Table 5.1, in the first three age groups the number of children being brought up in the family surpasses somewhat the number of the living children. This is due to the fact that the concept "child being brought up in the family" differs from the concept "child living with the mother". While the latter concept is a category, needed first of all for the reconstruction of the birth history, the concept "child being brought up in the family" was developed by the TCS 66 Study to study the attitudes towards family planning. This concept covers, therefore, all the children who are in the care of the mother and who may modify her attitude towards family planning (mainly the desired additional number of children). According to the definition used in the TCS 66 Study: "all the children should be regarded as children being brought up in the family who are reported by the respondent as belonging to the family, and who are actually being brought up (maintained, kept) by her, irrespective of the fact that they are her own, step or adopted children, or that they are kept by the state, non adopted, children of relatives or that they attend a nursery, kindergarten, day-home, school, or are accommodated in a boarding school or elsewhere. Those married children who share their household with the mother but who have independent incomes or who are kept by an other person (for instance, by the husband) should not be regarded as children being brought up in the family. According this definition the age-limit of childhood is 18 years, and where the child continues its studies it is the date of finishing the studies."

The different categories of children being brought up in the family, such as stepchildren, adopted children or children in the care of others, may possibly disturb the correct reconstruction of the birth history.

5.2 The Non-Registered Terminations of Conceptions

The number of conceptions is determined, in general, through the accounting of live-births and foetal deaths. There are, however, two groups of conceptions which, are, in general, not considered by demographic studies, viz. extrauterine pregnancies and early foetal deaths.

Some conceptions end in extrauterine pregnancies. The program of the TCS 66 Study also envisaged the survey of extrauterine pregnancies. On the basis of this survey it could be stated that the importance of extrauterine pregnancies for the pregnancy history is almost the same as that of still-births. 14.7 % of the women included in the sample of the TCS 66 Study had, on average, 1.11 extrauterine pregnancies, while 35.2 % had 1.10 still-birth. 16.3 extrauterine pregnancies and 38.9 still-births could be registered per 1 000 females included in the sample. With advancing age - as is shown in Table 5.2 - the number of those who had an extrauterine pregnancy or still-birth increased.

Table 5.2. Extrauterine Pregnancies and Still-births

Age (years)	Number of females in the sample	Proportion of females (%) who had		Extrauterine pregnancies per 1 000 females	Still- births
		extrauterine pregnancies	still- births		
15-19	157	-	6.4	-	6.4
20-24	1,084	1.8	9.2	1.8	10.1
25-29	1,507	8.6	29.9	8.6	30.5
30-34	1,622	13.6	30.2	14.8	35.1
35-39	1,724	16.8	38.9	19.1	42.3
40-44	1,646	26.7	48.0	31.0	55.3
45-49	1,060	17.9	55.7	18.9	59.4
Total	8,800	14.7	35.2	16.3	38.9

Table 5. 2 further shows that most extrauterine pregnancies were reported by 40-42 year old females, approximately twice as many as by 45-49 year old females. This is perhaps not accidental; ignorance and concealment of the older females might have played a role in it or possibly the impact of the factors changing over time created different conditions for these woman. The same tendency cannot be observed in case of still-births.

With regard to the frequency of extrauterine pregnancies it can be stated that it constitutes a considerable part of total conceptions; their omission seems to be unjustified when reconstructing pregnancy history, not only in respect of the number of conceptions or in the fact that woman become sterile, but also from the point of view of the efficiency of contraception.

Very early abortions constitute the other large, unobserved group of conceptions, caused by different zygopathies. From the ampulla of the oviduct (tuba uterina) the fertilised zygote arrives in the uterus in about 3 days and spends the subsequent three days, until implantation into the endometrium, in the uterine cavity multiplying during its migration at an increasing rate. Implantation takes, about 40 hours on the average; at the end of the second week (on the 14th day), the endometrium closes entirely above the zygote and the embryonic period begins (2nd-8th weeks). Subsequently the period of the quantitative increase of the foetus starts, to last till birth. The first week, the period of migration, the zygote is most sensitive to damaging factors; the grave, hereditary impairments, too, manifest themselves first of all in that period.¹²

First animal experiments have called attention to this problem. With regard to one part of mammals, on the basis of ovulation and of corpus luteum, the number of conceptions can be determined and compared with previously observed pregnancy histories. In this way a foetal wastage of 30-40 % was observed among pigs by Corner¹³, then by Perry¹⁴, and in the opinion of Brambell¹⁵ 43 per

¹² Horn, Béla - Zoltán, Imre: A szülészet tankönyve. (The Textbook of Obstetrics) 2nd edition, Medicina, Budapest, 1958. p. 587.

Czeizel, Endre: Vizsgálatok a magzati károsodások kóreredetének tisztázására. (Studies on the Origin of Foetal Injuries.) M. T. A. Manuscript, Budapest, 1965.

¹³ Corner, G. W. : The Problem of Embryonic Pathology in Mammals with Observations upon Intrauterine Mortality in Pigs. American Journal of Anatomy, 1923, 31, p. 523.

¹⁴ Perry, J. S. : Fecundity and Embryonic Mortality in Pigs. Journal of Embryology and Experimental Morphology, 1954, 2, p. 308.

¹⁵ Brambell, F. W. R. : Prenatal Mortality in Mammals. Biological Review, 1948, 23, p. 370.

cent of the foetuses of hares die, 10 % even before implantation. The very early foetal wastages endanger human reproduction, though very little is known about the size of this danger. Referring to the studies of American authors¹⁶, Bourgeois-Pichat¹⁷ writes the following: "Moreover, the table does not give any information about the first 4 weeks of pregnancy, in which the loss is probably very high. For very short durations - 1 or 2 days - the notion of foetal death itself vanishes and must be replaced by the fitness (or unfitness) of the ovum to be fecundated. Here again, we know hardly anything about this fitness. A very high proportion of unfit ova cannot be ruled out. To explain some of their observations, demographers have had to assume that in certain circumstances 75 % of the ova might be unfit for fecundation. The proportion might be even greater at the end of the child-bearing period. It might also vary among social groups. This enumeration of uncertainties gives some idea of our ignorance in a field so basic for the understanding of human reproduction." Though, there is very little known about very early foetal deaths, their existence cannot be contested. For instance, according to the experience of Hertig and his co-workers,¹⁸ out of the 250 females studied fertilized human ova could be found among 34 in the first 17 days of their development. Of the ova 10 were abnormal, and a further 3 ova were not entirely normal. Thus almost 30 per cent of the fertilized ova were already heavily damaged in the earliest period of pregnancy.

In most cases even the female herself is ignorant of such early foetal wastages. Direct interviews, therefore, do not offer any information. Still, some information can be obtained indirectly, by observing the duration of the menstrual cycles. Vincent,¹⁹ for instance, mentions the large series of Vollman

¹⁶ French, F. E.; Bierman, J. M.: Probabilities of fetal mortality. Public Health Reports 1962, 77, pp. 835-847.

Shapiro, Sam; Jones, Ellen W.; Densen, Paul M.: A life table of pregnancy termination and correlates of fetal loss. Milbank Memorial Fund Quarterly. 1962, Vol. XL, No. 1, pp. 7-45.

¹⁷ Bourgeois-Pichat, J.: Some unsolved problems raised by human reproduction. Advances in Fertility Control, Excerpta Medica Foundation. Vol. 2, No. 4, 1967, p. 47.

¹⁸ Hertig, A. T. et al: Thirty-four fertilized human ova, bed and indifferent recovered from 210 women of known fertility. A study biologic wastage of human pregnancy, Pediatrics, 1959, 23, p. 202.

¹⁹ Vincent, P.: Données biometriques sur la conception et la grossesse. Population, 1959, 11, pp. 59-82

from Switzerland, who had stated that more than 10 per cent of the cycles of females under 20 years last 40 days or more, though this proportion decreases in the older reproductive ages. Analysing the data of the India-Harvard-Ludhiana Population Study²⁰ (briefly Khanna Study), Potter and his co-workers compared the data of 11 communes in the Punjab with the findings of Vollmann and of the Japanese studies of Matsumoto and his co-workers.²¹ While, in general, the Japanese studies agree basically with the studies performed in Switzerland, in the Khanna Study the proportion of cycles lasting 40 days or longer among older females approaches 10 per cent of the menstrual cycles studied. In this connection the authors write: "This lack of decline makes sense only if a decreasing rate of long cycles was being counterbalanced by a rising incidence of early spontaneous wastage, a fixed or rising fraction of which was going unreported. From the fact that the two main caste groups - Jats and Chamars - did not significantly differ in their frequency of long cycles, it is tentatively concluded that denial of pregnancy despite missed periods was not the usual way of concealing induced abortion. It may, however, have been the main source of unreported spontaneous wastage."²²

Of course, the duration of menstrual cycles can seldom be reconstructed retrospectively even for short periods. In his survey of the K. A. P. Studies, Berelson mentions²³ that the level of information about the physiology of reproduction is low indeed; for example, fewer than 10 % of Turkish and Thai women correctly know the days of the cycle when conception is possible. There are much fewer who remember the time of the cycle and even fewer who keep records on this. Thus the study of this question cannot be included in the framework of the K. A. P. Study, destined to reveal the complete pregnancy history. Still, early foetal wastages cannot be ignored in the complete pregnancy history as they comprise a considerable part of the issues of the conception.

²⁰ Potter, R.G.; Wyon, J.B.; New, M.; Gordon, J.E.: Fetal Wastage in Eleven Punjab Villages. *Human Biology*, 1965, Vol. 37, No. 3, pp. 262-273.

²¹ Matsumoto, S.; Nogami, Y.; Ohkuri, S.: Statistical studies on menstruation: a criticism on the definition of normal menstruation. *Gunma Journal of Medical Science*, 1962, pp. 294-317.

²² Potter et al., 1965. pp. 270-271.

²³ Berelson, Bernard: KAP Studies on Fertility. (in *Family Planning and Population Programs*. Ed. By Berelson et al. The University of Chicago Press, 1966. p. 660.)

5.3 The Problems of Abortions

Apart from the issues of conception, often ignored in demographic studies (extrauterine pregnancies, and very early foetal deaths), and, apart from births (including still-births, i. e. late foetal deaths), the remaining issues connected with pregnancies (the early and intermediate foetal deaths) are called in the present paper by the common term abortion. Two kinds of abortions are distinguished: miscarriages, i. e. spontaneous or unintentional abortions and induced or intentional abortions. The latter may be therapeutic, i. e. abortions performed for health reasons or abortions applied for birth control purposes which, from the legal point of view, may be considered either legitimate or illegitimate.

In pregnancy histories spontaneous abortions occur rather frequently though the reliability of their data is often doubtful. According to the Hungarian TCS Study, 15 per cent of the married women questioned had had a spontaneous abortion (see Table 5.4), 1.37 spontaneous abortions were registered per one spontaneously aborting female. A somewhat higher proportion of 21 per cent was shown by the 1955 GAF Study²⁴ (including also still-births), the sample of which consisted of 2,713 18-39 year old white females selected at random, representing about 17 million American females. This latter study found 2,356 females in the sample who had had at least one completed pregnancy, and 25 % of them also had

²⁴ Freedman, Ronald; Whelpton, Pascal K. ; Campbell, Arthur A. ; Family Planning, Sterility and Population Growth. McGraw-Hill Book Comp. 1959. pp.31-35.

had a foetal death. According to an earlier American study,²⁵ performed by the Kinsey Institute, 22.1 % of married females, who had reached 35 years, had already had spontaneous abortion.

Another way of measuring the frequency of spontaneous abortions is to relate the number of foetal deaths to the total number of pregnancies. Summarizing the results of 20 studies, performed in developed countries, in an earlier publication²⁶ of the United Nations it was found that, in general, 95 spontaneous abortions were registered per 1 000 pregnancies. These proportions correspond with the observations of the TCS 66 Study, according to which 96 spontaneous abortions can be registered per 1 000 pregnancies (the figure is 78 if induced abortions are added to the number of pregnancies). A higher figure was named in the 1955 GAF Study; out of 6,418 pregnancies 831 ended in foetal death, i. e. 129 foetal deaths were registered per 1 000 pregnancies. This figure nearly corresponds with the 131 %²⁷ found by the Indianapolis Study, when out of 3,865 foetuses 3,358 were alive at delivery and 507 dead, the rate of foetal mortality. In both studies includes also still-births; but when excluded the rate of spontaneous abortions approximated 100. (Disregarding induced abortions, the foetal death rate was 114 per 1 000 pregnancies according to the TCS 66 Study.) Similar values also were obtained by the Khanna Study where - according to gestation age - 72 foetal deaths under 4 months, and 35 between the age of 4-6 months, i. e. altogether 107 spontaneous abortions and similarly 35 still-births were registered per 1 000 pregnancies. The combined foetal death rate was 136. It should be noted, however, that recently in Great Britain, Canada, and the United States the proportion of spontaneous abortions is believed to be higher.²⁸ According to Warburton and

²⁵ Gebhart, Paul H. ; Pomeroy, Wardell B. ; Martin, Clyde E. ; Christenson, Cornelia V. : Pregnancy, Birth and Abortion. Institute for Sex Research, 1958, p. 128.

²⁶ Foetal, Infant and Early Childhood Mortality. United Nations, Department of Social Affairs, Population Division. Population Studies, No. 13. ST/SOA/Series A/13, New York, 1954. Vol. I. p. 15.

²⁷ Whelpton, P. K. ; Kiser, Clyde V. : Social and Psychological Factors Affecting Fertility. Vol. 2. Milbank Memorial Found. New York, 1950. p. 312-313.

²⁸ Tietze, C. ; Martin, C. E. : Foetal Deaths, Spontaneous and Induced, in the Urban White Population of the United States. Population Studies, 1957. 11, pp. 170-176. Shapiro, S. ; Jones, E. W. ; Densen, P. M. : A Life Table of Pregnancy Termination and Correlates of Fetal Loss. Milbank Memorial Fund Quarterly, 1962. 40. pp. 7-45.

Fraser,²⁹ 120-215 ‰ of pregnancies end in spontaneous abortions, the rate of about 150 ‰ was found to occur most frequently. Higher rates than 200 ‰ were found by two estimates.³⁰

The proportion of spontaneous abortions depends greatly on the age of the mother as can be seen from the data of the TCS 66 and Khanna studies in Table 5. 3.

Table 5. 3. Spontaneous Abortions by Age of Mother

Age (year)	Number of pregnancies observed			Spontaneous abortions per 1 000 pregnancies		
	Khanna Study	TCS 66 Study*		Khanna Study	TCS 66 Study**	
		excluding induced abortions	including induced abortions		excluding induced abortions	including induced abortions
15-19	141	88	113	132.0	147.7	115.0
20-24	480	1,183	1,511	102.5	102.3	80.1
25-29	495	2,628	3,473	65.6	105.0	79.5
30-34	335	3,631	4,699	113.4	99.7	77.0
35-39	210	4,145	5,246	126.1	91.7	72.4
40-44		4,303	5,119		86.9	73.1
45-49	104	2,809	3,112	229.7	99.0	89.3
Total	1,765	18,787	23,273	106.8	96.0	77.5

* In the TCS 66 Study the age of the mother relates to the date of the interview; the pregnancy data cover the number of pregnancies cumulatively, up to this age. In the Khanna Study the age relates to the date of the last menstrual period; the pregnancies took place in the period of the observation. Source of data of the Khanna Study is the cited work of Potter, Wyon, New, Gordon pp. 264-265.

** In both columns the rate relates to spontaneous abortions but in one case the number of pregnancies does not include the induced abortions, while in the other it does.

²⁹ Warburton, D. ; Fraser, F. C. : Spontaneous Abortion Risks in Man: Data for Reproductive Histories Collected in a Medical Genetics Unit. The American Journal of Human Genetics, 1964. 16. pp. 1-25.

³⁰ Erhardt, C. F. : Pregnancy Losses in New York City. American Journal of Public Health, 1963. 53. pp. 1337-1352. French and Bierman op. cit.

According to the data of the Hungarian study, covering more than 20 000 pregnancies retrospectively, in the youngest age groups the rate of spontaneous abortions is very high. Over the age of 20 years it is lower and decreases slowly. The high rate of spontaneous abortions in the young age groups and its subsequent decrease is shown also by the Khanna Study (the rates found in the two studies are nearly the same for those aged 15-24 years). At the older ages, however, the probability of spontaneous abortions increases again, according to the latter study. The differences between the data can be explained, partly by the different techniques of the two studies: as against the Hungarian study of a retrospective character the data of the Indian study were gathered about pregnancies during the period of prospective field observations. On the other hand, the fertility differentials of the females observed must have also contributed to this, for, Hungarian married women bear most of their children between the ages of 20 and 29 when the probability of foetal deaths is the lowest, and over the age of 40 years, when the probability of foetal death is high, they hardly risk to bear children.

Due to the relation³¹ between foetal deaths and the age of the mother (or what is almost the same the order of births) the proportion of spontaneous abortions is influenced by the age composition of the female populations studied and the retrospective character of the study. In judging the problem of foetal deaths induced abortion is the other factor playing an important role. According to the TCS 66 Study nearly twice as many females had an induced abortion as had had a spontaneous one; 1.78 induced abortions were registered per one surgically aborting women in the sample. Thus the rate of induced abortions per 1 000 females is two and a half times as high as that of spontaneous abortions. As can be seen from Table 5.4, spontaneous abortion rate per 1 000 pregnancies is also considerably influenced by whether induced abortions are included or not in the pregnancies.

³¹ Bourgeois-Pichat, Jean; Relation between foetal-infant mortality and fertility. World Population Conference, 1965. Vol. II. Selected Papers and Summaries, Fertility, Family Planning, Mortality. United Nations, New York, 1967. pp. 68-72.

Table 5.4. Spontaneous and Induced Abortions

Age (year)	Number of females in the sample	Proportion of females (%) who had		Rate per 1 000 females	
		spontaneous	induced	spontaneous abortions	induced abortions
		abortions			
15-19	157	57.3	133.8	82.8	159.2
20-24	1,084	93.2	214.0	111.6	302.6
25-29	1,507	138.7	337.1	183.1	560.7
30-34	1,622	161.5	349.6	223.2	658.4
35-39	1,724	162.4	330.0	220.4	638.6
40-44	1,646	165.2	269.7	227.2	495.7
45-49	1,060	172.6	167.9	262.3	285.8
Total	8,800	149.5	286.3	205.0	509.8

The data of Table 5.4 show that the proportion of surgically aborting females and the number of their induced abortions increase rapidly up to the age group of 30-34 years; in the subsequent age group the same figures are stagnating, then, over the age of 40 years, they fall rapidly. This decrease is due either to the fact that among older women in the reproductive age there were fewer who had aborted in the period when abortions were illegal, or to the circumstance that they conceal their abortions to a much greater extent than younger women, whose abortions were performed mostly in the period of legalized abortions after 1955. Presumably, both factors play a role in this development of the proportions.

It is difficult to obtain data on induced abortions in such countries where they are illegal. In the course of the Indianapolis Study, for instance, only 84 illegal abortions were revealed, i.e. 22 % of the pregnancies and 166 % of the foetal deaths. In the United States, however, the number of induced abortions is presumably higher.³² Hertig mentions that abortions are certainly common and estimates their proportion at about 200 % of the pregnancies. "There are about 5 000 maternal deaths alone from this cause so that there may be a million or more self induced or criminal abortions per year in this country". This is not too low an

³² Hertig, Arthur R.: *The Overall Problem in Man*. (in *Comparative Aspects of Reproductive Failure*, Ed. by Kurt Benirschke. Springer Verlag, 1967. p. 29.)

estimate if it is considered that in Hungary, where in the decade preceding the TCS:66 Study, induced abortions were legal, and the proportion of the reported induced abortions was similar (192.8 induced abortions were registered per 1 000 pregnancies). In the United States, in 1955, a special committee was appointed to study this problem; it was stated that "a plausible estimate of the frequency of induced abortions in the United States could be as low as 200 000 and as high as 1 200 000 per year".³³ Surveying the problem of induced abortions a decade later Tietze adds to this that "no new data have become available since 1955 on which a more reliable estimate could be based"³⁴. There is however much data available from such countries where the question of abortions is treated in a more liberal way or where there is a free abortion system. In Japan, for instance, between 1953 and 1961, the yearly number of legal abortions surpassed 1 million (12-13 per 1 000 population, 600-700 per 1 000 live-births). Similar proportions have been experienced in the European socialist countries, where abortions were legalized and where in the early 1960's 200-700 legal abortions were registered per 1 000 live-births according to current statistics.³⁵ This was the case in the more liberal Scandinavian countries, while for most European countries only estimates of uncertain value are available. In Hungary, the proportion of induced abortions reached its peak in 1964, when about 18 induced abortions were registered per 1 000 population, 70 per females aged 15-49 years and 1 400 per 1 000 live-births.

³³ Abortion in the United States, Ed. by M. S. Calderone. Paul, B. Hoeber, New York, 1958. p. 180.

³⁴ Tietze, Christopher: Induced Abortions and Sterilization as Methods of Fertility Control. (Public Health and Population Change. Ed. by Sheps, Mindel C.; Ridley, Jeanne Clare. University of Pittsburgh Press, 1965) p. 400-401.

³⁵ See the above cited work of Tietze, further Glass, D. V.: Family Limitation in Europe; a Survey of Recent Studies. Research in Family Planning. Ed. by Kiser, Clyde V. Princeton, N. J. 1962. pp. 231-261. Klinger, András: Demographic effects of abortion legislation in some European socialist countries. World Population Conference, 1965. Vol. II. Selected Papers and Summaries, Fertility, Family Planning and Mortality. United Nations, New York, 1967, pp. 89-91. Family Planning and Population Programs. The University of Chicago Press, 1966 (Klinger, András; Abortion Programs, p. 475; Mehlan, K. -H.: The Socialist Countries of Europe. p. 211.)

It may be noted that even in countries for which current statistics of a good quality are available the number of abortions reported is inaccurate. Part of the abortions, mainly early ones, are never reported. As has been mentioned, the woman may possibly not become aware of such very early abortions and it is only a delay of menstruation that may direct her attention to it. There are also such females who want to conceal their abortion and perform it or have it performed under illegal conditions even under the circumstances of a legal abortion system. Mainly where abortions are illegal, the woman reports at the hospital with a haemorrhage and at the end the interruption (really an intentional abortion) will be registered as a spontaneous abortion. This possibility must be reckoned with even in legal abortion systems. Hungarian studies, for instance, show that "today it occurs frequently that induced abortions are registered in the hospital reports as spontaneous ones".³⁶

The borderline between spontaneous and induced abortions becomes frequently indistinct in the survey. As a rule however, this is, the smaller wrong. The reconstruction of the fertility history is disturbed mostly by the fact that women conceal, above all, their induced abortions.

³⁶ Bognár, Z. ; Czeizel, E. ; Hancsók, M. : A spontán vetélések kóreredetéről 500 eset retrospektív feldolgozása alapján. Magyar Nőorvosok Lapja, 1963. 26. p. 58.

5.4 The Concealment of Induced Abortions; an Estimate of Induced Abortions

In his study concerning the application of survey techniques of fertility studies³⁷ Mauldin puts the question quite rightly "in the sensitive area of fertility behavior, will people tell about their behavior, and will they tell the truth?" Referring to the study of Som and others³⁸ he further writes: "Even with reference to the simple statistic, how many births has a woman had, there is a great difficulty in obtaining correct information. People in many cultures are neither time nor numbers conscious and tend to forget the number of children born, those born within a specified time, and even the number of living children they now have." This is also shown in the papers of Poti, Chakraborti and Malaker³⁹ who stated in their study performed in Calcutta that wives were less co-operative than husbands and were ashamed of reporting the use of contraceptives mainly in large households.

³⁷ Mauldin, W. Parker: Application of Survey Techniques to Fertility Studies, Public Health and Population Change. Ed. Sheps, M. C. and Ridley, J. C. University of Pittsburgh Press, 1965, p. 98.

³⁸ Som, R. K.: On Recall Lapse in Demographic Studies. International Population Conference, Wien, 1959, pp. 50-61.
Coale, A. J.: The Population of the United States in 1950; a Revision of Census Figures. Journal of the American Statistical Association, 1955, 50, pp. 16-54
The Post-Enumeration Survey: 1950, U. S. Bureau of the Census.
Technical Paper No. 4. Washington, D. C. 1960.

³⁹ Poti, S. J.; Chakraborti, V.; Malaker, C. R.: Reliability of Data Relating to Contraceptive Practices. Research in Family Planning. Ed. Kiser, Clyde V. Princeton, N. J., 1982, pp. 51-55.

What has been said above supports the statement of the Committee on Comparative Studies that "probably the reports on abortion will be underestimates, even where abortion is legal."⁴⁰ The Variables point also to the fact that, for instance, "an attempt to obtain data on illegal abortions in the United States as part of the third Growth of American Families Study was unsuccessful". In Japan - as mentioned by Stycos⁴¹ - according to the fifth public opinion research⁴², 35 per cent of the females in the national sample had at least one abortion. On the basis of the high proportion of "no answers" the proportion of women who really aborted was estimated by the researchers to be 50 per cent at least. As can be seen from the data of Table 6.4, in Hungary, 28.6 per cent of the women reported induced abortions. In the opinion of Szabady, Klinger and Acsádi⁴³ this figure is unrealistic. Though in Hungary the overwhelming majority of induced abortions were carried out at the request of the woman in health institutions, and it was done in a legal way, both at the time of the survey and also a decade before, still, the researchers have assumed that, on the one hand, the former illegality of induced abortions, especially the heavy punishments imposed on them in the early 1950's, influence the female population even to-day in reporting their abortions, on the other hand, part of the population is ashamed of its abortions and is inclined to conceal them. This circumstance was also reported by the interviewers, partly on the basis of their impressions, partly on the basis of their experiences obtained when participating in the work of commissions giving permission to abortions. When processing the data of the TCS 66 Study it came to light that between 1960 and 1965 the women interviewed reported about 50-60 % of their abortions as compared with the data of the full-scope statistical surveys. This means that about 55 % of induced abortions can be evaluated in the fertility history of the woman.

⁴⁰ Variables... p. 27.

⁴¹ Stycos, J. Mayone: A Critique of the Traditional Planned Parenthood Approach in Underdeveloped Areas. Research in Family Planning. Ed. Kiser, Clyde V., Princeton, N. J., 1962. p. 493.

⁴² The Mainichi Newspapers. Fifth Public Opinion Survey on Birth Control in Japan, Tokyo. 1959.

⁴³ Szabady, Egon; Klinger, András: Az 1965-1966. évi termékenységi, családtervezési és születésszabályozási vizsgálat. Demográfia, No. 2, 1966, pp. 135-162. Szabady, E.; Klinger, A.; Acsádi, G.: The Hungarian Fertility and Family Planning Study of 1965-1966. Preventive Medicine and Family Planning. Proceedings, Fifth Conference of the Region for Europe and the Near East of the I. P. P. F. Copenhagen 5-8 July, 1966. pp. 265-274. p.

It should be noted that the primary aim of the TCS 66 Study was not to reveal the fertility history or to determine the number of abortions: in this respect current statistics of a good quality have been available in Hungary for a long time. The aim of the survey was to obtain such information on family planning and birth control which cannot be obtained by means of these statistics. The number of induced abortions and the composition of the aborting women are available from the annual statistical data, while other aspects of the problem can be investigated on the basis of the studies of 1960 and 1964.

It should be mentioned that in the sample of the TCS 66 Study those females who reported their induced abortions, did this in accordance with reality. The difference is due to the fact that one part of the women did not report their had induced abortions. On the basis of the regular abortion statistics it can be concluded that approximately as many might have concealed as reported their abortions.

Though, as has been mentioned, the aim of the TCS 66 Study was not to establish the proportion of induced abortions and the proportion of aborting women, still, induced abortions play a very significant role in the pregnancy history. Besides, it has also become necessary to estimate - as was already reported by Szabady,⁴⁴ - the number of women concealing their abortions in connection with the efficiency of contraception, and in general, in connection with the population's attitude towards birth control.

The estimate was based on the fertility history of the woman. The woman was assumed to be "unknown" with regard to induced abortions if there was such a long interval in her fertility history that it could not be explained on the basis of her other answers on the questionnaire. A study⁴⁵ started in Great Britain in 1946, was based on similar assumptions when processing data on birth control practice. In his survey of the European studies⁴⁶ Glass gave an account of them. Couples ever using birth control were classified in the study as follows: 1. having used birth

⁴⁴ Szabady, Egon: A családtervezési vizsgálatok egyes kérdései. (Some Problems of Family Planning Studies.) *Demográfia*, Vol. 10. 1967, 230-233.

⁴⁵ Douglas, J. W. B.; Blomfield, J. M.: The Reliability of Longitudinal Surveys. *Milbank Memorial Fund Quarterly*. 1956. XXXIV. pp. 227-252.

⁴⁶ Glass, D. V.: Family Limitation in Europe: A Survey of Recent Studies. *Research in Family Planning*. Ed. Kiser, Clyde V., Princeton, N. J. 1962. p. 257-259.

control appliances or methods, 2. definitely not having used birth control, and 3. having possibly used birth control but not of a mechanical or chemical. The last group, the category of "possible" was defined - according to Glass - "with reference to small families, long inter-pregnancy intervals, no categorical disapproval of all forms of birth control, and attitudes showing that no further children were desired."

Long, unjustified intervals in the fertility history are due either to sterility or to birth control. Thus, the Hungarian estimation did not call into question those cases where reference was made to sterility or contraception. The remaining part of cases indicates either concealed contraception or concealed induced abortion. Since, however, no considerable number of concealments could be revealed by a comparison of the contraception data with the data of other sources, such as, for instance, the data of the TCS pilot study of 1958-60, the data of surveys performed in health institutions in 1960 and 1964, and the data on the sales of means of contraceptions, it could be assumed that long, unjustified sterile periods cover concealed induced abortions. Considering the possibly denied, more primitive practice of contraception (mainly coitus interruptus) the duration of the "long" periods was considered 4-7 years, assuming that during such a long period a conception would take place even if some less efficient methods were applied. On basis of the above the material of the TCS 66 Study was divided into three groups:

1. the female had no induced abortion;
2. the female had induced abortion;
3. it is "unknown" whether the female had induced abortion.

The group "unknown" was conceived as follows. Each female in whose pregnancy history there was a long, unjustified, "empty" period, was qualified as "unknown" from the point of view of induced abortion. 5 or more years were regarded as a long period in the case of females younger than 30 years, and 7 or more years in case of 30 year old or older females. All these long and empty periods were regarded as unjustified, with the exception of the following cases:

1. the female reported at least one induced abortion (assuming, on the basis of the results of the preliminary processing, that if she reported one induced abortion she would also have reported the others),

2. such a disease or state was reported which causes, in general, physiological sterility or influences fecundity considerably by decreasing the probability of conception,

3. the married couple lived separately in the empty period (in this case the empty period was counted from the beginning of the new cohabitation),
4. several spontaneous abortions were reported,
5. several extra-uterine pregnancies were reported,
6. the respondent applied efficient (hormonal, barrier or chemical) methods of contraception regularly.

If, however, the interviewer did not find the answers to be sincere, or, if such a person was present at the interview who might have influenced the respondent in her answers or if it was apparent from the interview that the interviewer could not receive any sincere answers in his district, then, a one year shorter empty period was regarded as unjustified and this was also the case when the female reported "sterility" not specified in detail, or "infecundity". In the few cases when the interviewer became aware of such an induced abortion (for instance, through his work performed in the committees giving permission to abortions) as was not reported by the person interviewed, these were also included in the category "unknown", since they could not be included in the pregnancy history.

According to the above, 2,569 females, 29.2 per cent of the sample, could be included in the category "unknown". This percentage fully corresponded to the expected percentage of females concealing their induced abortions and it is likely that the females included in the category "unknown" are, in general, the same as the females concealing their induced abortions. Table 5.5 gives a picture of the distribution by age of the females who probably denied their induced abortions.

Table 5.5. Rates by Age of the Group "whose induced abortion are unknown"

Age (year)	Number of females with			Number of females with unknown induced abortion per 1 000 females with reported induced abortion
	unknown induced abortion	reported induced abortion	unknown and reported induced abortion	
	per 1 000 females			
15-19	-	133.8	133.8	-
20-24	2.8	214.0	216.8	12.9
25-29	84.3	337.1	421.4	250.0
30-34	278.1	349.6	627.6	795.4
35-39	393.3	330.0	723.3	1 191.6
40-44	460.5	269.7	730.2	1 707.2
45-49	520.8	167.9	688.7	3 101.1
Total	291.9	286.3	578.2	1 019.8

The proportion of females belonging to the group "unknown" increases with advancing age. This proportion can be neglected between the ages of 15-24 years, for in this age group there hardly occurs a long, empty period. It is striking, however, that this proportion increases considerably for the age group of 30-39 years, and, subsequently, it continues to increase gradually in the older child-bearing age. This tendency can be followed up in almost every year. On the basis of the data the conclusion can be drawn that among older females there are more who deny than who report their induced abortions. In the oldest age group the proportion of those concealing their induced abortions is three times as much as the proportion of those reporting them.

The number of women in the group "unknown" coincides with the number of those concealing their abortions, and also the proportions by age make it also probable that those belonging to the group "unknown" are, in fact, identical with those concealing their abortions. The proportion of those reporting on their induced abortions increases only up to the age of 28 years, then, it stagnates for 6-8 years and then begins to decrease. Actually, however, this is not the case. Current abortion statistics⁴⁷ show that in the last 10 years (1957-1966) the overwhelming majority of induced abortions was performed by 20-34 year old females (27.1-29.7 per cent by the 25-29 age group, 22.2-24.6 per cent by the 30-34 age group and approximately the same - 22.0-25.0 - by the 20-24 age group). The percentage of those aborting in the age group of 35-39 year olds is also rather high (13.0-15.6 per cent), while the smallest percentage can be found in the youngest and oldest child-bearing age group (4.4-7.7 and 3.9-5.1 per cent). It is evident that, beginning with the age of 28 years, not only those have abortions performed who had induced abortions earlier, but also new and new females enter the group of those applying abortion. The data of the 1960 Hungarian abortion study show, for instance,⁴⁸ that 42.3 per cent of the 25-29 years old, 37.4 per cent of the 30-34 years old, 37.1 per cent of the 35-39 years old, 41.4 per cent of the 40-44 years old and, finally, 47.2 per cent of the 45-49 years old aborting women apply induced abortion for the first time. A considerable part of those aborting in older age apply abortion for the first time, therefore, the number of females who applied abortion should

⁴⁷ Demográfiai Évkönyv, 1966. p. 115.

⁴⁸ Adatok a családtervezésről, a születésszabályozásról és a terhességmegszakításokról. Központi Statisztikai Hivatal, Budapest, 1963. p. 156

increase through the females applying abortion for the first time at least up to the age of 35-40 years, due to the great number of females applying abortion for the first time.

The joint rate of females having reported their abortions and of the group "unknown" increases almost uniformly up to the age of 36 years, then it stagnates (possibly it is somewhat less in the oldest child-bearing age in accordance with earlier habits). The fact that the number of females with "unknown" attitude towards induced abortion corresponds with their characteristics by age justifies the validity of the criteria used for the qualification. The same is also shown by the regional distribution of the data. In Szabady's opinion⁴⁹ the number of cases, in which the concealment of induced abortions can be suspected is smallest in Budapest, the capital (18 %), where, otherwise, abortions are performed most frequently; it is also relatively low in the other towns (22 per cent), while the rural population is mostly ashamed of reporting their induced abortions (35 p. c.). In this respect differences can also be found between the different counties of the country; the highest percentage of females who conceal their induced abortion can be found in the counties of Transdanubia, where illegal abortions have a long tradition, further in the county of Szabolcs-Szatmár, which has the highest fertility.

The separation of the group "whose induced abortions are unknown" has become justified when processing the data of the TCS 66 Study. The separate treatment of the group concealing their abortions makes the processing free from several faults and supplies also valuable information. Table 5.6 gives a picture of the importance of this kind of grouping. It contains the data of the pregnancy history, cumulated by age, and separately for the two groups. With advancing age the distribution of females by number of pregnancies is moving more and more, towards a higher number of pregnancies, and together with this, the average number of pregnancies also increases, though beginning with the 35-39 year old age group the proportion of those who had no pregnancy or only one, increases again.

⁴⁹ Szabady, op. cit. pp. 231-232.

Table 5. 6. Distribution of Married Females by Number of Pregnancies

Age (year)	Number of pregnancies							average
	0	1	2	3	4	5	6+	

Percentage of females whose number of pregnancies is known

15-19	49.7	36.3	9.5	1.3	3.2	-	-	0.72
20-24	20.7	43.0	22.0	8.4	2.9	2.0	1.0	1.40
25-29	5.1	24.8	31.5	19.1	10.1	5.3	4.1	2.41
30-34	4.2	11.6	22.7	23.3	17.4	9.2	11.6	3.32
35-39	7.2	8.1	15.6	21.7	17.7	13.0	16.7	3.65
40-44	9.7	12.1	14.9	16.0	14.9	10.6	21.8	3.72
45-49	15.2	15.3	10.2	13.4	13.2	10.8	21.9	3.44
Total	10.6	20.4	20.9	17.1	12.2	7.8	11.0	2.84

Percentage of females "whose induced abortions are unknown"

15-19	-	-	-	-	-	-	-	-
20-24	66.7	33.3	-	-	-	-	-	0.33
25-29	13.4	54.3	26.0	6.3	-	-	-	1.25
30-34	3.8	31.9	45.7	13.7	4.7	0.2	-	1.84
35-39	2.1	25.8	41.4	19.8	7.4	2.8	0.7	2.16
40-44	1.8	20.6	36.0	23.9	9.8	5.3	2.6	2.46
45-49	4.0	19.2	34.6	21.2	12.3	4.5	4.2	2.51
Total	3.4	25.3	38.3	19.5	8.3	3.3	1.9	2.22

There is, however, an essential difference between the two groups. The low number of children was not a precondition of including the females in the group "unknown", and really, one-third of this group had 3 or more pregnancies. Still, it can be presumed that, through the concealment of induced abortions, in most ages the females with a known number of pregnancies reported one pregnancy more (one and a half more in the age of 30-39 years) than those whose induced abortions are unknown. If we accept that the females in the group "unknown" concealed their induced abortions and if we assume that they had as many abortions during their life time as the other females, in the whole sample the number of pregnancies would amount to 26,702 and the average number of pregnancies per female would be 3.03.

Of course, even this number is rather low, and it can be concluded that the efficiency of the primitive methods of contraception used widely in Hungary (coitus interruptus, douche, lactation) cannot be underrated nor can foetal wastages (very early abortions), of which the female is ignorant, both being rather significant.

Subsequent corrections may help to improve the accuracy of the number of induced abortions, and there are also many possibilities to obtain better information in the course of the interview. The opinion of the Committee on Comparative Studies is that "With full recognition of the difficulties, we recommend that attempts be made to obtain such data. Abortion is of growing importance in many countries, and successive field efforts are needed to learn how to obtain better data. In this area as in others (e. g. , income) asking a series of logically related questions is likely to produce better results than asking just one. If a complete pregnancy history is obtained, asking the respondent to explain the reason for any long periods without a pregnancy and without use of contraception may elicit better information about abortion."⁵⁰ Further: "In some countries, detailed longitudinal studies may be needed to obtain accurate estimates. On the other hand, in Taiwan, and especially in Korea, where abortions are also illegal, sample surveys have obtained rather high abortion rates⁵¹, and the patterns of relationship between abortion rates and other characteristics are plausible, although the rates probably are too low in these data too." Yaukey⁵² reported on similar experience; he says of the survey taken in Lebanon that "almost one third (31 per cent) of the city Moslem educated couples married ten or more years had attempted one or more induced abortions." Though induced abortions are illegal in Lebanon also, still the reported induced abortion worked "in a direction which might help explain some major fertility differences among the social background types."

⁵⁰ Variables, p. 27.

⁵¹ Sung-bong Hong: Induced Abortion in Seoul, Korea. Seoul, 1966. pp. 91.

⁵² Yaukey, David: Fertility Differences in a Modernizing Country. Princeton, N. J. 1961. p. 60-62.

5.5 Sterility and Fecundity Impairments

Finally, it is necessary to mention one of the most important factors affecting fertility history, namely the problem of infecundity. We know relatively little about the influence of this factor. Campbell⁵³ writes as follows: "We were surprised to find that in 1955 about one third of the wives reported a specific impairment of the reproductive system, or had no known specific impairment but were unable to bear children at a normal rate." Another important statement made by the GAF Study was "nine per cent of the couples represented in the sample had had an operation, either on the husband or the wife, that made future childbearing impossible. Often these operations were obviously health measures - for example, a hysterectomy for cancer. In other cases, however, it was not always clear whether the operation was for health or contraceptive reasons."

In some countries sterilization is widely used as a birth control method. In the opinion of Stycos⁵⁴ "two separate surveys in Puerto Rico have attested to the remarkable popularity of this method. In 1962 a fifth of a large sample of mated woman attending general out-patient hospital clinics around the island were found to be sterilized, and a representative sample of the island's households in the same year indicated 16 per cent of the females sterilized. . . Sterilization is also

⁵³ Campbell, Arthur A. : Design and Scope of the 1960 Study of Growth of American Families. Research in Family Planning. E. Kiser, Clyde V. p. 174.
See also: Freedman-Whelpton-Campbell op. cit. Chapter 2

⁵⁴ Stycos op. cit. p. 494.
See also: Hill, J. ; Stycos, J.M.; Back, K. W. : The Family and Population Control. University of North Carolina Press, Chapel Hill, 1959.

becoming increasingly popular in Japan. The most recent national survey found 7 per cent of the women over 35 with contraceptive experience to be sterilized."

The Hungarian study accounts of similar frequencies. According to the data of Table 5.7, 3.7 per cent of the females, included in the sample, underwent an operation leading to infecundity. The proportion of the females sterilized is nearly 9 per cent in the 45-49 years old age group. With advancing age not only the proportion of subfecund females but also the proportion of females made physiologically sterile increases to the same extent. In the Hungarian TCS sample the proportion of females never controlling their fertility who reported an illness or change or any impairment of the reproductive organs affecting fertility, amounted to 4.2 per cent. Several of the females ever controlling their fertility were sterile already at the time of the study; considering these the proportion of non-sterilized sterile females reaches 5 per cent.

Table 5.7. Distribution of Married Females according to their Attitude Towards Birth Control, by Age, considering Sterility

Age (year)	User of birth control methods* (including induced abortions)	Non user				Total
		induced abortions "unknown"	without induced abortions	sterile	sterilized (surgically)**	
15-19	52.9	-	47.1	-	-	100.0
20-24	73.7	0.1	25.5	0.4	0.3	100.0
25-29	82.2	2.3	14.3	0.5	0.7	100.0
30-34	80.6	7.5	6.7	2.8	2.4	100.0
35-39	77.1	8.8	5.5	5.5	3.1	100.0
40-44	68.3	12.9	4.6	6.8	7.4	100.0
45-49	55.6	20.2	5.4	10.0	8.8	100.0
Total	73.6	8.3	10.2	4.2	3.7	100.0

* "Ever users".

** Out of these the proportion of those for whom it was unknown whether they had an induced abortion before becoming surgically sterile amounted to 0.6 per cent.

The Hungarian data show that physiological sterility and sterilization, performed presumably mainly for health reasons, is a basic factor of fertility that cannot be left out of consideration over the age of 30 years. Over the age of 40 the proportion of steriles is very high (15-20%), and those can be added to them who were ranked by the study - on basis of their earlier behaviour - to be among those who controlled their fertility but who have already reached the menopause.

A survey of some problems of fertility history shows that it is a difficult task to obtain information in this field, the reliability of the answers is often questionable even the data are contestable. Data on the fertility history of the female, are, however, so much necessary not only for demography but also for a number of other sciences, on the other hand the available information is so much incomplete that in spite of the undoubtedly existing difficulties we must not abandon future research in this field. During the coming years we have to increase our efforts to improve the survey technique as considerable progress can be achieved in this way.

APPENDIX I.

Model Questionnaire and Tabulation Program

for comparative family planning studies

Draft

Prepared by the IPPF Research Committee on Family Planning Trends of the International Planned Parenthood Federation of the Europe and Near East Region

I.1 Introduction

The model questionnaire and tabulation program serve the purposes of such studies as may not only offer proper information about the attitude towards birth control and family planning of populations living under different social and economic conditions but are also fully comparable among numerous countries of Europe and the Near East Region, making it possible for the individual countries to draw essential conclusions. The study covers also questions on fertility. The primary purpose of the questions on fertility (for instance, on fertility history) is however, not to determine the vital statistical parameters (for, with a few exceptions, more or less properly detailed and reliable vital statistical data are available for all the countries of the region), but to reveal differential fertility, the factors influencing fertility and the interrelations between fertility and family planning. The comparative program, taking into account the possibilities of Europe and the Near East Region, also enables the individual countries to complete the study with their specific, national program and to make comparisons with the basic results of the studies carried out in other regions.

The model questionnaire contains the main questions of the interviews which can be evaluated from the demographic (statistical) point of view. When determining the number of persons to be interviewed and when selecting the persons to be interviewed it is desirable to meet the requirements of sampling statistics.

For the purposes of international comparisons the study should cover the 15-44 year old married women. In countries where proper data are not available, it seems to be expedient to extend the sample to the 45-49 year old women also and

possibly even to women in the 50-69 age group, in order to obtain direct information about the last 40-50 years for the purposes of chronological comparisons.

If this can be organized, in addition to married women the study can be extended to the ever married, and possibly, unmarried women, i. e. over women with any marital status. In this case, however, when selecting the sample care should be taken that the subsample of married women should represent correctly the married women. Moreover when processing and publishing the data, the subsample of married women should be treated separately and, for the purposes of comparisons the data relating to them should also be given separately.

In countries where consensual union occurs frequently, the ever-mated women may also be included in the study. In this case the questions relating to the spouses or to the marriage should be regarded as being related to the persons living together.

Beside the questioning of women there also arises the necessity - possibly on the basis of a smaller sub-sample - to interview the men, with special regard to the differences between the answers of the spouses.

The information can be obtained by means of collecting and processing the data of the interviews. When determining and selecting the number of persons to be interviewed, the principles of sampling should be applied. In order to replace non-responses it is also expedient to design a reserve sample. During the interview a proper atmosphere and sincere relations between the interviewer and the person interviewed, more closely, the objective and subjective conditions of such relations should be ensured. The data collection can be controlled on the basis of the available full-scope statistical data (population census data; vital statistics, particularly birth statistics in case of a legalized abortion systems; abortion statistics; sales data of contraceptives etc.).

The present draft was prepared on the basis of the Hungarian fertility, family planning and birth control study of 1965/66 (TCS 66 Study), the first in the series of international studies promoted by the Europe and Near East Region of the International Planned Parenthood Federation. On the basis of this study and the preparatory materials of the Committee on Comparative Studies of Fertility and Family Planning of the International Union for the Scientific Study of Population,

suggestions on the core questions were made by Prof. D. V. Glass and P. C. Matthiessen in June, 1966. At the same time, a draft tabulation program was prepared by Dr. E. Szabady and Dr. Gy. Acsádi. Taking into account the suggestions made at the meeting of the above mentioned Committee of the International Union for the Scientific Study of Population, held at Ann Arbor, Mich., September, 1966, all these materials were discussed by the Research Committee on Family Planning Trends at its meeting held in London, between January 19 and 22, 1967. Participants at the meeting were on behalf of the Executive Committee of the Europe and Near East Region of the I P P F :

Dr. A. Braestrup (Denmark), President
Dr. T. Sjövall (Sweden), Vice-president
Mrs. J. Rettie (United Kingdom), Regional Secretary

on behalf of the Committee:

Dr. E. Szabady (Hungary), President
Mr. P. C. Matthiessen (Denmark), Secretary
Dr. G. Acsádi (Hungary)
Dr. J. Danesis (Greece)
Dr. D. V. Glass (United Kingdom)
Dr. J. Morsa (Belgium)
Dr. G. Valaoras (Greece)

observers were:

Mr. H. Gille (United Nations, Geneva)
Mr. L. Cseh-Szombathy (Hungary)
Mrs. Holbraad (United Kingdom)

The principles of the draft were adopted by the meeting. Dr. Szabady, Mr. Matthiessen, Dr. Acsádi and Dr. Morsa were charged to prepare detailed drafts. They made their suggestions, set forth below, at the Budapest meeting, held March 2 to 6, 1967. (The Budapest meeting was attended by Dr. P. Józán and Dr. G. Vukovich as observers.)

I.2 Model Questionnaire

I. SOCIO-ECONOMIC CHARACTERISTICS OF MARRIED COUPLES

A. Residence. (The name of the town or commune where the interview was performed; where the interview did not take place in the residence of the wife, the permanent residence of the wife should be recorded.)

B. Birth-place

1. Birth-place of the wife (where did your parents live when you were born?)
2. Birth-place of the husband (where did the parents of your husband live when your husband was born?)

C. Educational level

1. What is your highest educational level?
2. Did you finish school without obtaining a diploma?
3. How many years of school did you complete?
4. What is the highest educational level of your husband?
5. How many years did your husband attend a full-time school?

D. Employment of the wife

1. Are you currently employed? (Do you perform economically active work?)
If not, pass over to question E. 1. !
2. What is your occupation?
3. What is your employment status?
4. If you are not self employed, who is your employer?

E. Work history of the wife

1. Have you ever worked? (have you ever performed an economically active work?)
If never, pass over to question F. 1. !
2. When did you begin to work?
3. Did you work immediately before your marriage?
4. Have you ever worked away from home?
5. Have you ever worked for non relatives?
6. Have you ever performed a non-agricultural activity?
7. Have you ever worked for pay?

8. Can you remember all the periods when you have been employed since your marriage? (The years of beginning and concluding the different periods should be indicated.) Were you a full-time or part-time worker during these periods?

F. Occupation of the husband

1. What is the current occupation of your husband?
2. What is the employment status of your husband?
3. If your husband is not self employed, who is his employer?

G. Income

1. What is the total monthly income of your family?

If the family performs agricultural or auxiliary activity, it should be asked additionally:

2. In case you would purchase all that your family consumes out of the farm, how much would you have to pay for it?

H. Structure of the household

1. With whom do you live in a common household?
Enumerate all the members of the household (indicating their age, sex, marital status and relationship to the head of the household).
2. If several families live in the household, indicate the husband-wife and parent-child relationships within the different families, if not indicated under 1.

I. Cultural characteristics

In countries, where cultural characteristics such as religious, ethnic or language classifications are of numerical importance, questions of this character should also be asked.

II. TIMING AND CHARACTER OF BASIC DEMOGRAPHIC LIFE CYCLE EVENTS

A. Current age of wife and husband

1. When were you born?
2. When was your husband born?

B. Marriage data

1. Is this your first marriage?
2. When did you contract your present marriage?

If this is your first marriage, pass over to question C. 1. |

3. What is (are) the date of your former marriage/s/?

4. When did it (they) end?

C. Data of the husband

1. Is this the first marriage of your husband?

If so, pass over to question 4 !

2. How many times was your husband married before your current marriage?

3. How many children has your husband from these marriages?

4. Does your husband have children out of wedlock?

If not, pass over to question 6 !

5. How many children does your husband have out of wedlock?

6. How many of your husband's children are living together with you?

D. Periods of separation

1. Since your first marriage have you lived separately from your husband for a period longer than three months?

If not, pass over to question E. 1. !

2. When and how long did you live separately?

E. Pregnancy history

1. Have you ever had a live-birth?

If not, pass over to question 5 !

2. How many (living) children were born to you altogether?

3. Beginning with the eldest please state

a. their dates of birth

b. their sex

c. whether they are living with the mother or elsewhere or whether they are dead

d. in case the child died at what age did it die?

4. How many months have elapsed since your last live-birth?

5. Have you ever had a still-birth?

If not, pass over to question 8 !

6. How many still-births have you had altogether?

7. Please state

a. their dates of birth

b. their sex

c. and the number of months you were pregnant with them

8. Have you had a miscarriage or abortion?

If not, pass over to question 10 !

9. Please state

a. when it happened

b. how long you were then pregnant

10. Are you currently pregnant?

If so, for how many months?

III. ATTITUDES TOWARDS FAMILY SIZE AND CHILDSPACING

A. Family planning at marriage

1. When you married did you know how many children you wanted?

If not, pass over to question B. 1. !

If so,

2. how many boys did you want?

3. how many girls did you want?

4. how many children did you want altogether?

5. has your opinion changed?

B. Current desire for additional children

1. Do you now want more children?

If not, pass over to question C. 1. !

2. How many additional boys would you like?

3. How many additional girls would you like?

4. How many additional children would you like?

C. Ideal number of children

1. How many living children would you like altogether if you could start over and have just the number you would want by the time you reach the age of 45?

2. How many would you want to be girls and how many boys?

3. What do you think is the ideal number of children for an average couple in this country?

4. What do you think is the ideal number of children under your conditions?

D. Opinion relating to the last pregnancy

1. Before your last pregnancy did you want to become pregnant?

2. Before your last pregnancy did you want another child or would you rather not have had any more?

E. Opinion relating to the existing children

1. Considering your number of children, do you think you have too many or too few?

If neither, pass over to question F !

2. How many less or more would you like to have?
3. Do you feel that one or more of the pregnancies came sooner or later than wanted?

If neither, pass over to question F !

4. If so, how many came that way?

F. Five year plan for family planning

1. Do you want to have a child in the next five years?
2. How many children do you expect to have in the next five years?

G. Sterility

1. When studying these questions it was established that many couples cannot have the number of children they want. Do you have reasons to believe you are in such a position?

If not, pass over to the group of questions IV !

2. Why do you think so? (Have you tried unsuccessfully to have children or additional children?)
3. Have you and/or your husband consulted a doctor about this?

What were you told?

IV. ATTITUDES TOWARD FAMILY LIMITATION

A. Acceptance or rejection of birth control

1. In general, do you approve or disapprove of the idea of doing something to delay or prevent pregnancy?

If you approve, pass over to question B. 1. !

2. If you disapprove, would you approve under any circumstances?
3. For what reasons are you against family planning?

B. Acceptance or rejection of abortion

1. Do you approve of the use of abortion to terminate an unwanted pregnancy?
2. Do you approve of the use of abortion to limit family size?
3. If general disapproval is expressed: would you favour it under any circumstances?

V. KNOWLEDGE AND COMMUNICATION ABOUT FAMILY LIMITATION

A. Knowledge about birth control

1. Do you know anything how to postpone or avoid pregnancy?

If you know nothing, pass over to question B. 1. !

2. What methods have you ever heard about?

3. What methods do you actually know to use?

B. Would you like to know more about family planning?

VI. PAST AND FUTURE PRACTICE OF FAMILY PLANNING

A. Past practice

1. Have you ever used contraception?

If so, pass over to question B. 1. !

2. Have you ever had an induced abortion?

If so, pass over to question C. 1. !

3. Have you or your husband had an operation which prevents you having more children?

4. If so, when?

5. What was the purpose of the operation?

B. Contraception

1. In which pregnancy interval did you begin to use contraception?

2. What methods have you ever used?
Could you enumerate the methods used?

3. In which pregnancy interval did you use contraception (regularly or irregularly)?

4. Have you applied birth control since your last pregnancy?

5. Are you using a method currently?

6. Which methods have you used most recently?

C. Induced abortions

1. Which pregnancy did you interrupt by means of induced abortion?

2. How many induced abortions have you had altogether?

D. If you do not use contraception currently, do you intend to do so in the future?

I.3 Remarks and Comments on the Model Questionnaire

The model questionnaire does not deal with problems of a technical character and includes the core questions only.

- I. A. This question may also serve as one of the questions of identification. In some respects it may also depend upon the sampling technique.
- I. A-B. On the basis of these questions and the group of questions I. E. , some conclusions concerning the rural-urban background can be drawn.
- I. C. In the developing countries of the Near-East, a clear distinction should be made between the traditional (Coranic) schools and the modern ones.
- I. D. , I. E. It is also recommended to put a supplementary question with regard to the occupation of the wife and the occupation of the father of the husband.
- I. E. The questions in this group may supply very important data with a view to explaining family planning practices and the spread of the "small family" ideal.
- I. G. Beside the family income the household income may also be asked. It is recommended to ask the share of the husband's income in the total family income. A question about the possible income of the wife may also be put.

A clear definition should be given to the interviewer as to the type of income he has to record (the gross or net income, including or not, for instance, family allowance, taxes, membership dues etc.).

- II. A. This question serves as a basis to establish age. For this purpose the date of birth is ideal. If there is no possibility of obtaining it, it should not be left to the interviewer to make his own subjective estimate of the respondent's age on the basis of her physical appearance; in this case the date of birth should be estimated by means of the usual methods.

In respect of the other time data in Part II, the directives given under II. A. should be applied.

- II. E. Since the study of the pregnancy history, particularly of the intervals between pregnancies, is of a great importance these data should be revealed as accurately as possible for comparative studies.

A separate group of questions may be put to explain the intervals between pregnancies (for instance, in connection with separations, contraception, the work history of the wife etc.).

In some developing countries, for instance, in the Near-East, further study is required to reconstruct the whole family (without forgetting still-births and those who died in the meantime) and to obtain the approximate date of birth.

If it is difficult to obtain a complete pregnancy history then it is better to try to have a detailed birth record at least.

- V. In connection with the knowledge and communication about family limitation the model questionnaire contains only some core questions which may be of importance for international comparisons. Besides, the following questions may also be recommended for national purposes:

- V. A. For those claiming no knowledge of contraception:

Do you wish you had been told about it? Would you like to be told about it now? What kind of person would you prefer to give you the information? (Doctor, nurse, relative or friend? Clinic or private consultation?) If there were birth control clinics in your area, would you be willing to go to one? Would you prefer it if advice were given in a clinic or in some other way? Would your husband object to your getting the advice? Would he object to practising - or to your practising - birth control?

(These questions would probably not be relevant to any European country, but would be relevant to the Near and Middle East.)

- V. B. For those claiming knowledge (and practice) of contraception:

When did you hear of birth control first? How and from whom? Have you (or/and your husband) ever obtained professional advice? If yes, from a birth control clinic, a doctor, an other source (specify)? When? What has

induced you to seek that advice? How did you hear of the (clinic or doctor)? Were you satisfied with the advice? What kind of contraceptive was recommended to you? Have you (or your husband) continued to use it? If given up, why and for what other contraceptive; and on whose advice?

Looking back on your experience, what do you think would be the best way to obtain birth control advice? a. When should it be obtained (before, at or after marriage)? b. by what kind of organization? c. by what kind of person? d. should the advice be free?

Looking back on your experience, what do you think would be the ideal type of contraceptive? (What requirements would it have to meet? Who should use it - wife or husband?)

Supplementary questions:

- a. Have you discussed birth control practice with your husband? When? Who took the initiative? Who has practised it, mainly you or your husband? Why?
- b. Have you enjoyed sexual relations during your married life? How much? Has your husband enjoyed them as much, more or less than you? Do you think they are an essential or not very important part of married life?

- . -

It is recommended to take into account in the model questionnaire the views contained in the "Variables for Comparative Fertility Studies: a Working Paper" of the Committee on Comparative Studies of Fertility and Family Planning of the International Union for the Scientific Study of Population.

1.4 A Minimum Tabulation Program

The experiences of fertility and family planning studies show that comparisons require not only the standardization of the items of the studies but also the standardization of the tabulation programs and groupings used.

The minimum tabulation program contains some views and considerations on those groups of questions of the model questionnaire which should primarily be

collated for the purposes of international comparisons as well as on those principles which should be applied when grouping the questions.

The minimum tabulation program includes the following:

Tables for the control of the sample

Comments on the grouping

A minimum list of tables

1.5 Sample Control Tables

for countries in which proper statistical data are available

A. TABLES FOR COMPARISONS WITH POPULATION CENSUS DATA

Age of wife and husband in years combined with the number of living children

Duration of marriage by age groups,

combined with the number of children born,

combined with the number of living children

Socio-economic group or occupation by age groups

combined with the number of living children

Level of education of the women by age groups

combined with the number of living children

Marital status by age groups

combined with the number of living children

B. TABLES FOR COMPARISONS WITH VITAL STATISTICS

Number and outcome of pregnancies by year of confinement

Number of livebirths by sex, age group of the mother and year of confinement

Number of stillbirths by sex, age group of the mother and year of confinement

Number of livebirths by age group of the father and year of confinement

Parity by age group of the mother and year of confinement

Livebirths by parity, birth intervals and year of birth

Interval between the last livebirth and previous birth by year of birth and age of the mother

Number of livebirths by marriage cohort and year of birth of the mother

I.6 Comments on the Grouping

The following text contains only those comments on the grouping, which were discussed by the Committee:

I. A-B. Residence, birth-place

The grouping may take place according to the following points of view:

- larger regional units by the administrative division applied within the country or by an aggregated administrative division,
- urban and rural settlements,
- population number of the settlements by using the following categories:

settlements with

	-	2,500 population	
2,501 -	20,000	"	
20,001 -	50,000	"	
50,001 -	100,000	"	
100,001 -	1,000,000	"	
1,000,001 -	or more	"	

- rural-urban background grouped as follows:

Rural birthplace, rural residence

Rural birthplace, urban residence

Urban birthplace, rural residence

Urban birthplace, urban residence

I. C. Level of education

The comparison is based on the following two groupings:

- no education

the educational level is:

primary

secondary (secondary school-leaving certificate)

higher (academy, university diploma)

- number of forms completed, by years;

a more aggregated grouping:

he or she attended school for

0

1 - 4

5 - 8

9 - 12

13 - 16

17 and more years

I. D. and F. Occupation

This item should be classified by occupation, employment status and industry. It is advisable to take into consideration the classification of the International Standard Classification of Occupations and the International Standard Industrial Classification of all Economic Activities, at least their main groups containing 10 categories. It seems to be expedient to make also an aggregate classification of these criteria.

I. E. The work history of the wife

This item may be connected with the place of work, place of residence and occupation of the husband from the point of view of the relation of the couple (wife) to the rural or agricultural background (retrospectively).

It is advisable to process the work history of the wife in connection with her marriage and pregnancy history as well. First of all, the following codes should be proposed:

- duration (total) of the wife's work
- intervals between pregnancies + wife's work
- ratio between length of work and length of marital life

I. G. Income

The income per month should be shown by national currencies.

For the purposes of international comparisons, however, at least 3 (low, medium, high) income categories should be distinguished, according to the

general opinion prevailing in the country concerned. It is also advisable to distinguish between very high and very low income categories. The income of those engaged in agriculture should be given separately.

II. B. and D. Duration of marriage

On the basis of these items the net duration of marriage should also be coded (excluding separations).

III. A. and B. Changes in the family plans

On the basis of these items changes in the plans should also be coded.

II. B. and F. Future plans

When coding the items of III. B. and III. F. the group of items III. G. should also be considered.

VI. B. Contraception

It is advisable to apply the following list (possibly indicating the methods used jointly or alternately, thus, for instance, diaphragm and jelly, coitus interruptus and douche, condom or coitus interruptus etc.):

Oral contraceptives

Intra-uterine devices

Diaphragms, caps and other pessaries

Chemical contraceptives

Condom

Rhythm method (Ogino-Knaus)

Coitus interruptus

Douche

Sterilization

Sexual abstinence

Other

I.7 A Minimum List of Tables

The minimum list of the tables was not discussed by the Committee, thus the tabulations below indicate only a few criteria which cannot be neglected when tabulating.

I. Differential criteria*

Topics	I. A	B	C	D	E	F	G	H	I	II. A	B	C	D	E
II. E	X	X	X	X	X	X	X	X	X	X	X	X	X	
III. A	X	X	X	X	X	X	X		X	X	X	X		X
B	X	X	X	X	X	X	X	X	X	X	X	X		X
C	X	X	X	X	X	X	X	X	X	X	X	X	X	X
D	X		X	X	X	X	X			X	X			
E	X		X	X	X	X	X			X	X	X	X	X
F	X		X	X		X	X	X	X	X	X	X	X	X
G	X	X	X	X	X		X			X				X
IV. A	X	X	X	X	X	X	X	X	X	X				X
B	X	X	X	X	X	X	X	X	X	X				X
V. A	X		X	X	X	X	X		X	X	X	X		X
B	X		X	X		X	X	X		X				X
VI. A	X	X	X	X	X	X	X	X	X	X	X	X	X	X
B	X	X	X	X	X	X	X	X	X	X	X	X	X	X
C	X	X	X	X	X	X	X	X	X	X	X	X	X	X
D	X	X	X	X	X	X	X	X	X	X				X

* A considerable part of the tables should be processed combined with a third criterion, too. Additional criteria are, first of all: age of wife, duration of marriage, socio-occupational group, educational level, number of children etc.

II. Aspects of analysis*

Topics	II. E.	III. A	B	C	D	E	F	G	IV. A	B	V. A	B	VI. A	B	C	D
II. E		X X					X X		X X		X		X X X			
III. A			X X	X X	X X				X X		X					
B				X X	X X	X X			X X		X X			X X	X	
C							X		X X				X X	X	X	
D						X X			X X		X X		X X	X X	X X	
E							X				X X		X X	X X	X X	
F									X X		X X					
G													X X	X		
IV. A											X X		X X	X X	X X	
B											X X		X X	X X	X X	
V. A												X	X X	X X	X X	
B														X X	X	
VI. A														X X	X	
B															X X	
C																X

* The above indicated tables also require a combination with differential criteria.

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The number of tables to be prepared for international comparisons is much higher than the number of aspects given above. This is partly due to the fact that some topics include several tabulated items; a cross-classification (tabulation) of several items may also be desirable.

APPENDIX II

Sample Surveys on Fertility and Family Planning Trends*

II.1 Introduction

44. The Working Group had before it a working paper entitled "Variables for Comparative Fertility Studies" prepared by a committee on comparative studies of fertility and family planning of the International Union for the Scientific Study of Population (IUSSP) and a draft of a model questionnaire and tabulation programme for comparative family planning studies prepared by a research committee of the International Planned Parenthood Federation (IPPF), Europe and Near East Region.

45. It was noted that the two documents covered to a great extent the same ground and dealt with the same types of studies. However, while the plan prepared by the committee of the IUSSP consisted of a core list of items to be included in fertility and family planning trends studies, the paper prepared by the IPPF included an actual model questionnaire and plans for tabulation. Furthermore, the IUSSP plan was intended to be applicable to surveys in a variety of countries, particularly countries in developing regions, but the proposal of the IPPF research committee was aimed mainly at the needs of European countries. Dr. Szabady presented a brief comparison between the two schemes.

46. Before considering detailed recommendations for fertility and family planning studies in Europe, there was a general discussion of what types of data

* The text is part of the Report of the Working Group on Social Demography. First Meeting, Geneva (Switzerland), 5 to 8 December 1967. Organized by the Division of Social Affairs of the United Nations Office at Geneva, United Nations, Geneva, 1968. Report, SOA(ESDP) 1967/3. pp. 14-19.

could be obtained by such studies. Among other things, it was suggested that information should be obtained on ideal age at marriage and discussions, if any, between spouses about the desired family size and use of family planning. An attempt might also be made to obtain information about regularity of use of methods of family planning and about frequency of sexual relations. Attention should be paid to practice and attitudes in the period between last childbirth and the interview. For some countries, urban-rural classifications were often not meaningful; when data on migration were obtained it was important to know at what age migration had taken place. Items on occupation and industry of the respondent should be included.

47. Some members of the Working Group pointed out the difficulties of tabulating data of complicated questionnaires. All surveys had their limitations and it seemed important to limit the number of questions and give more attention to obtaining reliable answers.

48. It was agreed that international recommendations on research in this area could be of considerable importance, partly in stimulating countries to undertake the surveys in question and partly in facilitating comparability of data on a cross-national basis and thus avoiding repetition of mistakes and errors which had been made elsewhere.

49. The Working Group considered in detail the model questionnaire mentioned above prepared by the IPPF research committee. It was decided that a recommended list of topics should be agreed upon as a first step. Later on a questionnaire should be prepared suggesting how the questions could be asked. It was realized, however, that each country had to translate the basic questionnaire into its own language and that therefore it was not possible nor even desirable to adopt recommendations on an exact formulation of questions. Consequently, the recommendations should not go beyond developing a suggested standard questionnaire. Following such a questionnaire a recommended tabulation programme should be developed.

50. The Secretariat was requested to prepare as soon as possible a revised questionnaire, keeping in mind in particular the various suggestions for changes made in the discussion and reported on briefly below.

II.2 General Comments on Model Questionnaire

51. The scope of the questionnaire should be limited to items of importance in the majority of the countries in Europe. It was agreed that the recommendations on topics to be included in the surveys should be given as a whole and not grouped in two or three categories according to priorities. However, countries which were not able to implement the recommendations as a whole should, for those parts which they selected for implementation, ensure that they were carried out in conformity with the recommendations.

52. Relevant international recommendations with regard to population censuses, household inquiries, etc., should be taken into account, as appropriate, in order to avoid any conflicts.

53. It was agreed that explanations should be included in the questionnaire, at appropriate places, to explain briefly to the respondents the reasons why groups of questions or individual questions were to be asked.

II.3 Specific Comments on Model Questionnaire

54. The following specific suggestions were made for revising the various items in the questionnaire:

1. Socio-economic characteristics of the married couple

C. Educational level. It was proposed that this part of the questionnaire could be simplified and that question C. 3 on the number of completed school years might be sufficient. It was pointed out that the main purpose was to obtain information to study the effects of education upon fertility and attitudes towards family planning. The international classification of levels of education now being prepared by UNESCO should be taken into account.

D. Employment of the wife. Information should preferably be obtained on economic activity, occupation and industry. In the present formulation, questions on occupation and employment status were only to be asked of those currently employed. International recommendations with regard to the classification of unpaid family workers should be taken into account. Allowance might also be made for part-time work.

E. *Work history of the wife.* The following two questions might be included: occupation at time of marriage and intention (if any) to continue working for the next five years. On the other hand, items 5 to 8 inclusive could be deleted altogether.

F. *Occupation of the husband.* See under item D above.

G. *Income.* In view of the difficulties which questions on income might give rise to, especially in some countries, it was proposed that information should only be obtained about the relevant income group (range of income groups to be presented on a card) and that this item should come late in the interview.

Item 2 might be deleted as being too difficult and not relevant in the majority of families.

H. *Structure of the household.* It was agreed that the unit for investigation should be the nuclear family (including living-in relatives, if any). This would also relate to the scope of the income concept under G.

2. *Timing and character of basic demographic life cycle events*

B. *Marriage data.* Item 1 should refer to first marriage. Items 3 and 4 could be combined.

C. *Data on the husband.* Item 3 should refer to all live-born children and be combined with item 4.

E. *Pregnancy history.* The question should be presented as a table in which all pregnancies are recorded: /i/ live-born, /ii/ still-born, or miscarriage, /iii/ month and year of occurrence, /iv/ sex of child, /v/ still living, /vi/ living with the mother.

3. *Attitudes towards family size and child spacing*

A. *Family planning at marriage.* Item 1 should be reformulated for example as follows: "Did you have any idea about how many children you wanted when you married?" "If yes, how many?" Similar questions might be asked about the views of the husband. An item might be added on whether the matter had been discussed with him at that time.

Item 4 should precede item 2.

Item 3 might be deleted.

Item 5 should be expanded, and included for the purpose of checking if the opinion had changed and, if so, why.

B. *Current desire for additional children.* This group of questions should be combined with item A.

C. *Ideal number of children.* Items 1 and 2 belong under A and B. A question about ideal family size might be put as follows: "If you had a daughter who was going to marry, how many children would you like her to have?"

D. *Opinion relating to the last pregnancy.* Item 1 should be deleted as it seems identical with item 2.

E. *Opinion relating to existing children.* This should be combined with B above to avoid overlapping. It might be introduced by: "You now have . . . children. Would you like to have had more or less?" "Why?" "Did any of your children come earlier or later than wanted?"

Item 4 to be related to each pregnancy.

F. *Five-year plan for family planning.* Delete the term "five-year plan" and enquire about how many children are wanted in the future.

Item 1 should refer to expectations rather than to desire, if any, for more children within the next five years and should be supplemented by a question on "How strongly do you feel about it?" (as a closed question).

Item 2 should be followed by a question on "When". (See GAF questionnaire)⁷. An additional question might be included on the total number of children expected by the age of 45.

G. *Sterility.* The heading should include sub-fecundity. Item 27 in the IUSSP plan could be used, but in an elaborated form, to include also women who are currently pregnant - cases of sub-fecundity.

4. *Attitudes towards family limitation*

The heading should refer to family planning. The attitudes of husband and wife should be taken into account. (The IUSSP scheme, particularly item 47,

⁷ Freedman, R., Whelpton, P.K. and Campbell, A. A., *Study of Growth of American Families*. New York, 1959.

was noted.) Questions might be added on whether the spouses had had any discussion and as to who took responsibility for family planning, if any.

A. *Acceptance or rejection of birth control.* Item 2 might be reformulated to read: If you disapprove, "Might there be some circumstances in which you might approve?"

B. *Acceptance or rejection of abortion.* Questions on abortion have to be asked in a cautious manner and with some explanatory introduction. They could also be used as probing questions with reference to earlier reported pregnancies.

Items 1 and 2 might be combined as there appears to be little difference between them.

Specific questions could be asked on: "Did you have any miscarriage?" "Did you help any miscarriage to come about?"

5. *Knowledge and communication about family limitation*

The heading should refer to family planning. Enquiries should be made on possible husband and wife discussion. Questions might also be included on where information on contraceptives was obtained and where people would like it to be available. Account should be taken of the IUSSP plan but by making it more explicit on various institutions and channels. The inclusion of some items on marriage conflicts, attitudes towards married life, etc., should be explored.

II.4 General Observations

55. Possible recommendations for the size of the sample and the sample frame were not discussed in detail, but it was agreed that a stratified random sample should in all cases be recommended in order to enable measurement of the degree of accuracy of the data and to facilitate international comparability. The samples should always be of sufficient size to be able to provide results with a desirable degree of accuracy. Recommendations could not be made on how a stratified sample was to be drawn as it depended upon the basic data available in each country.

56. It was recommended that suggestions should be made for the proposed surveys to be repeated at an interval of some years to ensure that up-to-date information would be available and indications of changes in attitude be brought to light.

57. Members of the Working Group gave information on studies carried out recently, or planned to be undertaken, in their own country or by the organizations they represented. The IPPF had given financial support to studies in Greece and the United Kingdom. The results of these studies, together, with those of studies carried out along similar lines in Belgium and Hungary, would be published shortly in *Population Studies*. Czechoslovakia had a scheme of multi-purpose surveys which included some topics on family planning; e. g. longitudinal studies on a sample of urban couples married in 1963 and of rural couples married in 1964 had been initiated. Spain had carried out an elaborate survey which covered fertility but not family planning aspects.⁸ In Denmark and Sweden a pilot study had been carried out. In Italy a study had been undertaken and the results published by the *Annals of the New York Academy of Sciences*. The Economic Commission for Europe reported on a fertility study carried out in the Soviet Republic of Latvia among couples married in 1959.

⁸ Spain, Foundation Foessa: *Social Survey of Spain*, 1966.

APPENDIX III

Hungarian Publications on Fertility and Family Planning 1958-1968

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