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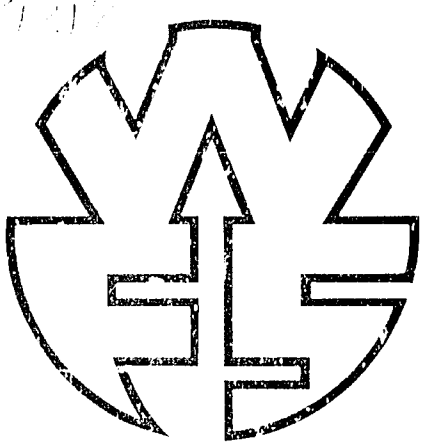

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The Survey of Fertility in Thailand, 1975: A Summary of Findings

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The World Fertility Survey is an international research programme whose purpose is to assess the current state of human fertility throughout the world. This is being done principally through promoting and supporting nationally representative, internationally comparable, and scientifically designed and conducted sample surveys of fertility behaviour in as many countries as possible.

The WFS is being undertaken, with the collaboration of the United Nations, by the International Statistical Institute in cooperation with the International Union for the Scientific Study of Population. Financial support is provided principally by the United Nations Fund for Population Activities and the United States Agency for International Development.

This summary is one of a series containing the salient findings of the Country Reports No. 1 of the countries participating in the WFS programme. A copy of the report itself: *The Survey of Fertility in Thailand: Country Report No. 1 (Vols. I and II)* is available for reference at all WFS depository libraries, or may be obtained from the Institute of Population Studies, Chulalongkorn University, Bangkok 5, Thailand, at no charge.

For information on other Country Reports, WFS publications, or a list of depository libraries, write to the Information Office, International Statistical Institute, 428 Prinses Beatrixlaan, Voorburg, Netherlands.

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THE SURVEY OF FERTILITY IN THAILAND (SOFT) :

A SUMMARY OF FINDINGS

1. THE SETTING

Thailand is a tropical country located in South-East Asia. The total population in mid-1975 was estimated to be around 42 million, with density of around 80 persons per square kilometer. The country is predominantly agricultural, and at the time of the 1970 Census only 13 per cent of the population lived in places classified as urban areas. Population exceeded 20,000 persons only for 37 localities, and two-thirds of the urban population was concentrated in a single metropolitan centre, the Bangkok Metropolis, which had an estimated population of 4.1 million by mid-1975.

Thailand is divided into four main regions: North, North-East, Central, and South. The Northern Region, extending to Burma in the north and west, includes sparsely settled mountainous and forested areas with densely settled areas of fertile rice cultivation in the valleys; one-fifth of the country's population lives in this region. The North-Eastern Region bordering Laos has relatively infertile soil and insufficient irrigation facilities, yet relatively high population density: around one-third of the country's population lives in this region. The Central Region, also containing around a third of the national population, includes the capital city of Bangkok and is one of the most fertile areas in the world for rice cultivation. Excluding Bangkok Metropolis, the population density for this region is only slightly higher than the less fertile North-East. The Southern Region bordering Malaysia is the smallest both in area and population, and contains around one-eighth of the country's population.

The Thai population is predominantly Buddhist; the only significant minority are the Muslims, comprising around 4 per cent of the population. By South and South-east Asian standards, levels of literacy and education are relatively high. According to the 1970 Census, 89 per cent of the males and 75 per cent of the females aged 10 years or over were able to read and write. Of the population aged 6 years and over, 79 per cent of the males and 69 per cent of the females had attended school, though a vast majority of the women did not go beyond the primary school. Average household size is around 6 persons; the majority of households consist of "nuclear" families, though it is common for newly-married couples to live with their parents. In the past, marriage has been nearly unversal in Thailand, though the age at first marriage for both males and females has been traditionally high by Asian standards.

The levels of fertility are thought to have been high throughout most of the 20th century. The gross reproduction rate has been estimated as 3.1 and the crude birth rate as 42 per thousand for 1964-67. The population is, naturally, relatively young: in 1970, 45 per cent of the population was under 15 years of age, the median age being 17 years.

Following control of diseases (particularly Malaria), the pre-World War II death rate of around 30 per thousand declined to under 20 per thousand by the mid-1950's, and to just over 10 per thousand by the mid-1960's, resulting in a growth rate of over 3 per cent. For the mid-1960's the infant mortality rate has been estimated as 85 per thousand and maternal mortality rate as 4 per thousand.

Official population policy and the resulting family planning programme are of very recent origin. In response to the rapid increase in population, the Government of Thailand announced a national Population Policy in 1970. The policy was based on a comprehensive report on the possible adverse effects on economic and social development of the prevailing high rate of population growth. The report was prepared by the National Economic and Social Development Board together with the Ministry of Public Health and the Institute of Population Studies at the Chulalongkorn University. The objectives of the Population Policy were to inform and motivate couples about family planning, making services more readily available throughout the country, integrating family planning activities with maternal and child health services, and most significantly, reducing the population growth rate from over 3 per cent to around 2.5 per cent by 1976. The official family planning programme emphasized three methods of contraception: the IUD, pill, and female sterilization. Subsequently, male sterilization and injection were added to the list.

2. THE SURVEY

The national agencies responsible for the planning, co-ordination and implementation of the Survey of Fertility in Thailand (SOFT) were mainly the Institute of Population Studies at Chulalongkorn University (IPS) and the National Statistical Office (NSO).

SOFT consisted of four separate surveys: (1) *Household Survey* designed to collect data on households, their characteristics and economic status including family income and households and business assets; (2) *Husbands' Survey* designed to provide data on husbands' views on family size, child-rearing conditions and children's education, advantages and disadvantages of large and small families, expectations of financial and other help from children, and finally on husbands' knowledge and use of contraceptive methods; (3) *Fertility Survey* in which ever-married women aged under 50 years residing in households were interviewed using a questionnaire almost identical to the WFS Core Questionnaire; and finally, (4) *Community Survey* to provide data on the general characteristics and socio-economic conditions at the village level, including availability of organizational and institutional services of various kinds.

The sample consisted of 4,465 households selected with equal probability from 267 clusters, and was a sub-sample of listings of households prepared for Round III of the Survey of Population Change, then in progress. Interviewing for the Household and Husbands' surveys was conducted during March and April 1975 by 98 male enumerators and 44 supervisors working under technical staff of the NSO. The Fertility

and Community surveys were conducted during April to June 1975 by 60 female interviewers with 16 field supervisors and 15 field editors, working under the IPS. Response rates were as follows: Household Survey, 96 per cent; Husbands' Survey, 92 per cent; and Fertility Survey, 88 per cent. The 4,465 sample households yielded around 3,300 husband interviews and around 3,800 female interviews. The husbands' and the wives' questionnaires were matched manually case by case, so that wives' fertility could be studied in relation to the husbands' fertility preferences, ideas about costs and benefits of children, knowledge and practice of contraception, etc. Complete matching could not be achieved. Due to additivity of non-response from the two interviews organized and conducted independently, the number of completed and matched "couple-interviews" was just under 3,000.

The First Country Report for SOFT, published in 1977, provides detailed statistical tables as well as a broad and preliminary review of the main findings of the Survey. The following two sections provide a summary of that review. All conclusions are tentative, pending careful and thorough appraisal of the quality of the data to be carried out as part of the planned further analysis of the survey results.

3. FINDINGS: LEVELS AND TRENDS

3.1. NUPTIALITY AND EXPOSURE TO CHILD-BEARING

Though reliable data on illegitimate births are not available, it appears that in Thailand child-bearing takes place largely within marriage, defined here as any sexual union involving cohabitation.

Marriage has been almost universal; only 3 to 4 per cent of women aged 40 or over remain never married. Traditionally the age at marriage for Thai women has been relatively high: of women aged 35 or over, one in two had not married by their 20th birthday, and just under one in four had not married by their 23rd birthday. Only 5 per cent of the oldest women report marrying at ages under 15, and this proportion drops to 2 per cent for all women currently aged 15-19. The data also indicate a gradual tendency towards later marriage in recent years, though the detailed pattern of change is an unusual one. It appears that for those women who marry before the age of 25, there has been no historical change in the mean age at marriage, which for this sub-population is 19.2 (in exact years). However, an increasing proportion do not marry before age 25, and it remains to be seen whether this trend will lead to an increase in the proportion remaining single throughout the reproductive years.

For the sample of ever-married women as a whole, 12 per cent of the first marriages have been dissolved by separation and divorce and 6 per cent by widowhood. Among women first married 5-9 years ago the respective figures are 11 and one per cent, while among those first married 20-24 years ago the figures are 17 and 11 per cent. Hence a relatively high incidence of separation is found even at shorter marriage duration, while the level of widowhood reflects relatively low levels of adult male mortality. Two-thirds of the women whose first marriages were dissolved have remarried; 92 per cent of the ever-married women are currently

married and there is little change in the proportion up to marriage durations of 15-19 years.

Of all ever-married women, 60 per cent are currently exposed to the risk of conception. The 40 per cent non-exposed are distributed as follows: 8 per cent are currently not married, 15 per cent report fecundity impairment, 10 per cent are currently pregnant and 8 per cent are contraceptively sterilized (6 per cent female sterilizations and 2 per cent male sterilizations). The prevalence of contraceptive sterilization follows the characteristic "inverted U" shaped curve by age, marriage duration, or parity. The highest figure recorded is for women with 4 children ever-born, of whom 16 per cent are sterilized. The proportion who are either exposed or contraceptively sterilized (the latter can also be regarded as "exposed", but using a very efficient contraceptive method) varies only a little by age up to 39 years, even less by marriage duration of up to 19 years or by number of living children from 1 to 6. The higher proportion not exposed due to a current pregnancy at younger ages tends to be balanced by a higher proportion reporting fecundity impairment at older ages.

3.2. FERTILITY

The table below compares the mean number of children ever-born to ever-married women by current age as reported in the Census in 1970 and by SOFT/WFS in 1975. The mean parities of the 20-24, 25-29 and 30-34 year age groups show decline between 1970 and 1975 of 17, 13 and 9 per cent respectively. These results corroborate other evidence of declining marital fertility in Thailand. Nevertheless, methodological differences between the Census and the Survey should be borne in mind; also, it is necessary to be cautious regarding recent trends in fertility prior to a thorough appraisal of the birth history data from the survey.

MEAN PARITY	CURRENT AGE							
	15-19	20-24	25-29	30-34	35-39	40-44	45-49	15-49
Census (1970)	0.7	1.8	3.0	4.3	5.5	6.4	6.5	4.0
SOFT (1975)	0.7	1.5	2.6	3.9	5.0	6.1	6.8	3.9

Age at first marriage is an important demographic factor directly affecting the level of age-specific marital cumulative fertility. However, at a [illegible], the negative association between fertility and age at marriage becomes marked generally only beyond marriage durations of 20 years or more. Exceptions to this are the small minorities who marry very young say under 15 years of age, and those who marry relatively

late say at ages 22 or over. For these two groups the negative association is marked at all marriage durations and is likely to be associated with biological factors, namely adolescent sterility and lack of exposure during the years of peak fecundity, respectively.

The table below shows the number of children ever-born to currently married women by years since first marriage. The fact that child-bearing continues at a substantial rate through later years of marriage is indicated, for example, by the increase in the mean number of children ever-born to women married 25-29 years ago (mean 7.5) to the mean for the same women five years ago (mean 7.1)*.

CHILDREN EVER-BORN	YEARS SINCE FIRST MARRIAGE						
	<5	5-9	10-14	15-19	20-24	25-29	30+
Situation as of Present	1.0	2.6	3.9	5.2	6.2	7.5	7.8
Situation as of 5 Years Ago	1.0	2.7	4.3	5.5	7.1	7.6	-

The latter figure corresponds to marriage duration of 20-24 years five years ago and is itself substantially higher than the current mean (6.2) for the same marriage duration: indicating a decline in marital fertility. However, this recent decline in fertility is not present for the first 10 or so years of marriage; in fact the mean number of births in the first five years of marriage is remarkably constant around 1.7 for the various marriage cohorts.

Retrospective birth histories permit computation of age-specific fertility rates for the current or recent period as well as for earlier periods from which recent trends in period fertility may be discernible. The rates for the two five-year periods presented below should be considered as preliminary, pending a thorough appraisal of the quality of the birth-history data on which they are based.

AGE GROUP	15-19	20-24	25-29	30-34	35-39	40-44	45-49	TFR
ASFR 1965-1969	.07	.25	.29	.26	.21	.15	(.03)**	6.25
1970-1974	.07	.22	.22	.18	.17	.08	.03	4.85

* *It may also be noted that the prevalence of primary sterility is low in Thailand, as only 3 per cent of the ever-married women aged 45-49 reported no live births*

** *Assumed figure.*

The Total Fertility Rate (TFR), i.e., the average completed fertility if ASFRs prevailing at a time were to remain constant, shows a decline of around 20 per cent from 1965-1969 to 1970-1974. Fertility decline for ages 25-34 appears particularly significant. These data support the conclusion reached from other studies in Thailand that fertility has declined fairly rapidly since the mid-sixties, though there may be some uncertainty about the magnitude of the decline.

3.3. PREFERENCES CONCERNING THE NUMBER AND SEX OF CHILDREN

Of currently married fecund women, 57 per cent reported that they do not wish to have another child. The data indicate that the major determinant of the attitude towards future child-bearing is the number of living children (see figures below), and suggest that for a given family size, little difference is made by current age, age at marriage, and duration of marriage.

NUMBER OF LIVING CHILDREN	0	1	2	3	4	5+	All
% WANTING NO MORE CHILDREN	5	19	46	64	81	93	57

It appears that the majority of the women favour 2 or 3 children but with a substantial minority wanting 4.*

Comparing the wife's attitudes with those of the husband, it is found that 80 per cent of the couples agree as to whether or not they want another child, and the level of agreement rises with increasing family size. The overall proportion not wanting any more children is almost identical for husbands and wives.

We can obtain a measure of the *total number of children* wanted, by adding to the number of living children the additional number wanted. The mean totals of children wanted by women with none, one, and two living children were 2.8, 2.6 and 2.9 respectively, indicating a consensus among lower parity groups for relatively small families of 2 to 4 children.

Another measure of family size ideals is based on the question, asked of husbands as well as wives: "If you could choose exactly the number of children to have in your whole life, how many children would that be?" Again, actual family size emerges as the major determinant of reported desired family size, but as shown below, women with five or more children were willing to report a desired family size less than that achieved. In fact, for any family size group the mean desired size is under 5 children.

* *There is some evidence, however, to believe that certain categories (for example, rural women with lower levels of education) misunderstood the time reference in the question on future intentions on having a child. The percentage not wanting a child appears too high in some cases. Because of this doubt, this variable has not been included in the discussion on differentials in Section 4 below.*

NUMBER OF LIVING CHILDREN	0	1	2	3	4	5+	All
DESIRED FAMILY SIZE (for currently married women)	3.0	2.8	3.2	3.6	4.0	4.6	3.7

The mean desired family size for the husbands is only slightly higher, being 3.9 children. The overall distributions for husbands and wives are very similar, although for individual couples there is considerable disagreement.

Regarding preferences concerning the sex of the next child, both husbands and wives who want more children show a definite preference for a boy: 52 per cent of the husbands and 51 per cent of the wives preferred a boy; 28 and 35 per cent respectively preferred a girl, the remainder being indifferent. However, this preference for sons appears to be less strong in relation to decisions regarding limitation of family size: for example, for women with two living children, 51 per cent of those with one child of each sex did not want another child, compared with 42 per cent of those with no daughter and 34 per cent of those with no son.

3.4. HUSBANDS' ATTITUDES ON ADVANTAGES AND DISADVANTAGES OF CHILDREN

In an effort to identify factors influencing fertility behaviour, the Husbands' Questionnaire included a number of questions relating to the advantages and disadvantages of large and small families. Of course a wide range of customary and traditional pressures exerted through family and community relationships enters into the process of determining family size, and these are seldom articulated in a formalized survey interview. The questions asked were intended to identify considerations which were recognized by respondents as being associated with family size.

Responses to open-ended questions on advantages and disadvantages of "large" (defined as 6 or more children) and "small" (defined as 2 or fewer children) families suggest a tendency to favour smaller rather than larger families. While 35 per cent of the husbands saw no disadvantage in having a small family, only 4 per cent saw no disadvantage in having a large family.

The primary advantages of a large family were seen as economic benefits and security, such as care in old age or illness. Psychological factors such as happiness, love and companionship of parents or other children were mentioned only by a very small minority. While the most commonly mentioned advantages of small families also concerned economic factors (namely, lower cost and financial burden), factors of a socio-psychological nature, including better opportunities for rearing, educating and disciplining children and giving them care and attention - also featured very prominently. Over a third of the responses were in this last category.

In response to more specific questions on "expectations"* from children, 64 per cent of the respondents expected financial support from their children, and 88 per cent expected support in illness and old age. Furthermore, a majority (55%) considered a family of four children as a "heavy economic burden". Generally, the pattern of responses to these attitudinal questions varies little by age or marriage duration, suggesting that the attitudes expressed cannot be explained as being simply rationalizations for existing family size. In addition, the pattern is generally consistent with that for achieved or desired family size discussed earlier; for example, on average those who see many specific advantages in having large families also have a higher desired family size as well as a higher achieved family size for a given age or marriage duration. The pattern of responses showed interesting urban-rural differentials, to be described in Section 4.2 below.

3.5. KNOWLEDGE AND USE OF CONTRACEPTION

Over 96 per cent of ever-married women report having heard of at least one modern method. The percentages who have heard of specific modern methods are: Pill (92%), IUD (86%), Female Sterilization (87%), Male Sterilization (70%), Injection (70%), Condom (48%), and other female methods (22%). About 40 per cent of ever-married women have used at least one modern method, and another 6 per cent have used a traditional method but no modern method. The pattern of use of any method by current age and number of living children is similar to that found in many other developing countries, with ever-use relatively low among the younger and older age groups and among women with very small or very large families. Women between the ages 25 and 34 years with two to four children had the highest proportion of ever-users (about 60%). The percentages who have ever-used specific modern methods are: Pill (26%), IUD (9%), Female Sterilization (6%), Male Sterilization (2%), Injection (5%), Condom (4%), and Other Female Methods (1%).

Confining attention to couples with both spouses married only once, the overall percentage reporting ever-use is identical for husbands and wives (49%). Consistency between individual husbands and wives is not so high: only 75 per cent of the couples indicate an identical pattern of ever-use, though if we consider only the use of modern methods the level of consistency rises to 82 per cent. For around 10 per cent of the couples, only the husband, and not the wife, reported ever-use of any method. Similar levels of "under-reporting" were found for the husbands.

It is clear from the data that there has been a substantial increase in contraceptive practice in Thailand during the past few years. Turning to the current use of contraception, we note that organized family planning in Thailand is relatively new, so that levels and patterns of current-use resemble those of ever-use. Thirty seven per cent of currently married non-pregnant women (which is equivalent to 46 per cent of the "exposed" or contraceptively sterilized women) are currently using a method. Of the current users, the distribution by specific methods is: Pill (41%), IUD (18%), Female Sterilization (18%), Male Sterilization (6%), Injection (6%), Condom (1%), and "inefficient" methods (9%).

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* *The Thai word used in the questionnaire was actually nearer to "hope" than to "expectation".*

As with ever-use, the highest proportions protected by contraception are found in the intermediate age and family size groups. The fact that only 9 per cent of currently married non-pregnant women with no living children are practising contraception suggests that the desire to delay the birth of the first child is rare. The dramatic increase to 36 per cent among those with one child, however, suggests that spacing between the first and second child is now widespread. There is no consistent association, for a given family size, between the number of living sons and the proportion of women who are current users, thus supporting the earlier noted conclusion that preference for sons, although existing, is not sufficiently strong to affect much the attitudes towards family limitation.

Regarding the relationship of contraceptive practice with fertility preferences, it was found that women who reported that they had already exceeded their desired family size had markedly lower levels of current use (for example, 32% for women aged 25-34) than those whose desired and achieved size were the same (43% for women aged 25-34). This pattern which holds true across all age groups, is however, confined to the level of current use, but does not extend to ever-use. Hence the "surplus" fertility of those who had already exceeded their desired family size resulted perhaps more from failure to persist in effective use rather than from any reluctance to try contraceptive methods.

4. DIFFERENTIALS BY BACKGROUND CHARACTERISTICS

Of the several background variables included in the study, the three most commonly used are summarized below.

4.1. REGIONAL DIFFERENTIALS

One of the significant features emerging from the data was a very marked and consistent regional difference in cumulative and current fertility, family size preference and contraceptive use. As shown in the table below, the North-east and the South are characterized by relatively high fertility, high desired family size and low level of contraceptive use.

The current trend towards lower fertility in Thailand appears to be strongest in the North and Central regions including Bangkok Metropolis. In fact, a comparison of the levels of current fertility with those of cumulative fertility suggests that regional differentials in fertility are increasing at present.

	REGION					PLACE		ALL
	North	Central	Bangkok Metropolis	South	North-east	Urban	Rural	
CHILDREN EVER-BORN	3.9	4.2	3.8	4.6	4.8	3.9	4.5	4.4
BORN IN PAST 5 YRS	0.7	0.7	0.8	1.1	1.3	0.8	1.0	1.0
DESIRED FAMILY SIZE	3.3	3.4	3.4	4.1	4.1	3.4	3.7	3.7
EVER USED METHOD	52	55	62	28	36	60	43	45
CURRENTLY USING	44	45	50	18	30	49	35	37

4.2. URBAN-RURAL DIFFERENTIALS

The table above also shows marked and consistent urban-rural differences in fertility, family size preference and contraceptive use. Except for early years of marriage, urban women have lower cumulative fertility at a given marriage duration. Differentials in current fertility are even larger and tend to increase with marriage duration, which again suggests a diverging trend. On the other hand, comparison with previous data suggests that the recent significant increase in contraceptive use has tended to make urban-rural differences in use less pronounced. The pattern of variation in the level of contraceptive use by family size is similar for urban and rural areas, though a very marked urban-rural gap exists for women aged under 25 - suggesting that urban women are more likely to initiate contraception relatively early in life. Thirteen per cent of the urban ever-married women (or their husbands) are contraceptively sterilized, a rate nearly twice as high as that for rural women.

Regarding differentials in nuptiality, we note that for women raised and still living in rural areas the mean age at first marriage* is 19.0 compared with 20.4 for those who have always lived in urban areas.

"Traditional" economic benefits of children were greatly valued overall by Thai men. However, these values were far less entrenched in urban areas. The productive utility of children was substantially higher in rural areas than urban areas in every respect, including help in the family business or farm, help in the house, or earning income for the family. Urban husbands expected to place less reliance on their children for support in old age, but even in urban areas 80 per cent expected to receive some financial help from their children in old age. Despite the urban-rural differentials mentioned above, in both urban and rural areas children were expected to be the principal source of economic, emotional, and practical support for their parents in old age.

On the other hand, perceived economic burden of raising children was as high in rural areas as in urban areas. In fact, these costs were reported everywhere as a highly salient disadvantage of having a large family. The argument that the perceived cost of children is very low in rural areas does not hold up in the case of Thailand.

4.3. DIFFERENTIALS BY LEVEL OF EDUCATION

In considering educational differentials it should be remembered that the number of women in the higher educational groups tends to be small and that, due to the relatively recent expansion in educational facilities as well as different nuptiality patterns, the better educated women tend to be relatively younger with shorter marriage durations.

Women with no education tend to marry at younger ages (the difference in the mean age at first marriage between those with no schooling and those with 5 or more years of schooling is over 2.5 years); they also tend to have a higher incidence of marriage dissolution; particularly in the first few years of marriage. Once marriage duration is controlled, differentials in cumulative fertility emerge only beyond 5 or more years of schooling. (For example, the mean number of children ever-born, standardized on marriage duration, is 4.0 for those with no schooling or less than five years of schooling, and 2.9 for those with five or more years of schooling). Better educated women tend to have a higher "tempo" of early marital fertility, though this differential is reversed at longer marriage durations. On the other hand, for a given family size there is only a minor association between the total number of children desired and level of education, while the proportion expecting no financial help or support in old age from children is very markedly higher for better educated groups.

Regarding levels of knowledge and use of contraception, the magnitude of differentials may be seen from the following figures for those with no schooling and those with 5 to 10 years of schooling, respectively: the percentage not knowing any contraceptive method: 4 per cent versus less than 1 per cent; prevalence of ever-use: 32 versus 63 per cent (differentials for the middle age or parity groups are significantly more prominent); prevalence of current use: 27 versus 43 per cent.