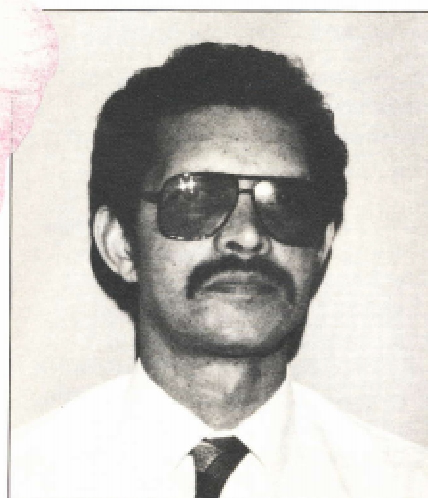
Contraception in a Family Practice in Cape Town - W M Pick



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Curriculum vitae

William Moses Pick was born and educated in Cape Town, matriculated at Trafalgar High School in 1958, and in 1964 received the MBChB at UCT. After some time at the Baragwanath Hospital he joined a family practice in Cape Town from 1967 to 1984; during this time he also spent a year in England in family practice units in Dorchester and London. Since 1985 William has been in the Dept of Community Health at UCT.

Summary

This article reports on the pattern of contraception in a general family practice in Cape Town; the type of contraception used, the reason for using it (or not using it), parity, age-factors, religion, side effects, smoking, blood pressure - all these aspects contribute to the pattern.

S Afr Fam Pract 1990; 11: 12-17

KEYWORDS:
Contraception; Birth Control; General Practice; Teenage Pregnancy; Smoking

Background

In 1985 the 415 women attending a general practice in Ravensmead over a three month period were interviewed with regard to their use of contraception. Of these women 201 (48,4%) used some form of contraception at the time of the interview while 231 (55,6%) had ever used contraception. Of the teenagers interviewed, 20% used some form of contraception and 75% of these were on injectable hormones.

Hormonal methods (both oral and intramuscular) caused the greatest number of side effects of which headaches and irregular bleeding were the major ones.

Methods of contraception used were strongly associated with age and parity with 87% of the women over 40 years having had tubal occlusion. Of women with more than 3 children, 57% had tubal ligation and 22% used oral contraception.

Married women were more satisfied with their method of contraception than single women.

Of the users 38,3% had chosen the method of contraception themselves and the rest had the method of contraception prescribed by a health worker. Approximately 90% reported that they were satisfied with the method being used.

Socio-economic status had no relationship with either the use or non-use of contraception, or with the method of contraception used.

About one third of pill users smoked, a fact that gives cause for concern in view of the increased morbidity and mortality that occurs in these subjects.

Introduction

The importance of individualised "tailormade" contraception has been recognised and strongly advocated by Sapire.[1] In order to develop such services, it is necessary to have information on patterns of contraceptive practice.

Although various community based studies have been conducted by the Human Sciences Research Council (HSRC), little information regarding contraceptive practice in women attending general practices in South Africa exists.[2]

This article reports on the pattern of contraception in a general practice. Information concerning the type of contraception used, the reason for usage, and factors related to usage were collected. The general practice is in Ravensmead, a suburb situated about 16 km north of the city of Cape Town. Contraceptive services

are provided in the area by 2 general practitioners, a local authority clinic and the nearby Tygerberg Hospital.

The population is approximately 22,632 people.[3] There were 1,368 births in 1985 of which 12,7% were to teenagers.[4]

Methods

The study is of a cross-sectional descriptive design. A trained interviewer administered a pretested questionnaire to all women between the ages of 15 years and 54 years who attended the general practice over the three-month period between August and October 1985. Demographic data which included age, marital status, religion, and occupation of respondents was noted. Information on method of contraception, reasons for use or non-use, parity, side-effects, cigarette smoking, and on blood pressure measurement was collected but no inquiry about sexual activity was made.

Results

The study included 415 women. The response rate was close to 100% as there was only one refusal. Information was incomplete in 8 cases.

The mean age was 27,9 years while the median age was 26 years. Of these women 201 (48,4%) practised some method of contraception at the time of the interview.

Contraceptive Methods

Of those who used any form of contraception 32,8% (66) used oral contraception, 29,8% (60) used injectable hormones, 12,4% (25) used an IUCD, 20,3% (41) had undergone tubal ligation, 2,1% (5) used withdrawal, 1,9% (4) used the Condom. (Table I).

Injectable hormones were the commonest method used in teenagers, though the numbers were small; (5 out of 7).

Between 20 and 29 years, oral contraception and injectable hormones were equally popular, while tubal occlusion was the most commonly used method in the 30 to 39 year age group, especially when they had had more than 3 children.

Reasons for choice of Method

While 77 (38,27%) had chosen the method themselves, 84 (41,93%) had the method prescribed by a nurse or doctor. For 7% (14) other methods were medically contra-indicated while 12% (24) had experienced side effects with other methods. Five (5) subjects (2,5%) gave no explanation for choice of method.

Non-use of Contraception

The proportion of subjects using contraception increased with increasing age from 15 years to 39 years, (Table I).

Of the 214 subjects who did not use any form of contraception 13,4% were pregnant at the time of the interview: 2,5% stated that their sexual partners disapproved of contraception, while 28,8% provided other reasons, including the planning of a pregnancy. Side effects were cited as the reason for non-use in 12% of subjects; 40,7% provided no reasons for not using contraception.

Women were not asked whether they were post-menopausal or not.

Marital Status

Of the interviewees 265 (64%) were married while 134 (32,5%) were single, 7 (1,7%) were divorced, 3 of whom used contraception and 9

Table I: Method of Contraception vs Age

Method	Age Category (Yrs)					
	15-19	20-29	30-39	40-49	50+	Total
Oral Con	1(14)	44(42)	20(29)	1(4)	0(0)	66(32,8)
IUCD	0(0)	9(9)	14(20)	2(9)	0(0)	25(12,4)
IM horm	5(72)	43(41)	12(17)	0(0)	0(0)	60(29,8)
Condom	0(0)	2(2)	1(1)	0(0)	1(33)	4(1,9)
Withdrawal	1(14)	3(3)	0(0)	0(0)	1(33)	5(2,1)
Tubal lig	0(0)	3(3)	22(32)	15(87)	1(33)	41(20,3)
Total	7(100)	104(100)	69(99)	18(100)	3(100)	201(99,3)
% Users	18	43	58	59	100	

(percentages in brackets)

(2,2%) were widowed of whom 2 used contraception.

A greater proportion of married women (80%) than single women (25%) used contraception (p less than 0,05) and a greater proportion of single women (54%) than married women (27%) used injectable homones, (p less than 0,006).

Marital status was statistically significantly related to age and parity, the proportion of married women increasing with increasing age and parity.

Parity

Increasing parity, as shown in Table II, is associated with an increasing use of contraception, (Correlation coefficient 0,82; p less than 0,05).

Oral contraception was the major method used by the few nullipara (11 out of 110) who practised contraception. Withdrawal was the second most commonly used method in nullipara.

As parity increased, the method of contraception changed. The use of injectable hormones decreased as parity increased. Tubal ligation was the main method of contraception in subjects with 3 or more children.

Religion

Religious affiliation had no effect on the use or the non-use of contraception with no statistically significant difference in the proportion of Roman Catholics and Protestants using contraception.

Social Class

Most subjects fell into social classes II, III and IV as defined by Schlemmer and Stopforth.[5]

This had no influence on the use or non-use of contraception and had no influence on methods of contraception.

Table II: Parity and Contraception

Method	Parity							
	0	1	2	3	4	5	6+	Total
Oral con.	5(4,5)	30(27)	27(30)	8(16)	5(22)	0(0)	1(10)	76
IUCD	1(0,9)	7(6)	10(11)	9(18)	0(0)	2(14)	0(0)	29
IM Hormns	1(0,9)	36(32)	20(22)	9(18)	2(9)	3(21)	0(0)	71
Condom	1(0,9)	2(2)	0(0)	0(0)	0(0)	0(0)	1(10)	4
Withdrawal	3(3)	0(0)	1(1)	0(0)	1(4)	0(0)	0(0)	5
Tubal lig	0(0)	1(1)	5(6)	14(29)	13(57)	6(42)	7(70)	4
None	99(90)	35(32)	27(30)	9(18)	2(9)	3(21)	1(10)	176
Total	110(100,2)	111(100)	90(100)	49(99)	23(101)	14(98)	10(100)	407

NB: 1. subjects with incomplete data were not included

2. percentages in brackets

Table III: Side Effects

Side Effect	No.	%
Headache	70	32,1
Bleeding	37	16,4
Loss of Libido	31	14,2
Weight gain	26	11,92
Rash	20	9,17
Nausea	20	9,17
Other	13	5,96

Side Effects

Questions about side effects were asked of all those women who were currently practising contraception or who had ever used contraception. Of all users, 70% (all methods) responded affirmatively to closed questions about side effects.

The major side effects reported by respondents were headaches, bleeding disturbance, loss of libido and obesity. (Table III) Subjects who were using injectable hormones reported the most side effects, followed by those on oral contraceptives and the IUCD (Table IV). Side effects were reported with all methods of contraception (including tubal occlusion) except for the use of the condom.

Satisfaction

While 90,4% of subjects reported that they were satisfied with the method of contraception used, 9,6% were not satisfied, most of the latter reporting side effects as the main reason for dissatisfaction. A significantly larger proportion (96%)

Table IV: Side Effects and Method of Contraception

Method	Number of Patients with Side Effects					
	Nil	Bleeding	Rash	Headaches	Weight Gain	Libido Loss
Oral Con	150	11	7	24	7	11
IUCD	72	2	0	6	1	3
IM Hormn	138	15	4	24	12	12
Condom	11	0	0	0	0	0
Withdrawal	14	0	1	0	0	0
Tubal Lig	116	6	4	9	2	2
Other	21	0	0	1	1	0

in the 30 - 39 year age group were satisfied than in the 15 - 19 year age group (63%). (Chi square test, p less than 0,004)

Cigarette Smoking

33,97% (n=141) of all subjects interviewed, smoked cigarettes.

21 out of 64 users of oral contraception smoked (32,89%).

120 (85%) of all smokers smoked fewer than 10 cigarettes per day.

Homonal methods caused most side effects especially headaches and irregular bleeding.

In spite of the small number of smokers, smoking (both in terms of number of cigarettes and duration) increased with increasing parity.

Blood Pressure Monitoring

80,58% (n=166) of the subjects using contraception had their blood pressures checked regularly at the source of contraception (mainly the local family planning clinic).

Discussion

The proportion of women using contraception in this study was smaller than that (73%) found in a study in Hanover Park, Cape Town in 1974.[6] The two studies are however not directly comparable as the Hanover Park study was community-based while the present study concerns women attending a general practitioner and clearly are not representative of the general female population in Ravensmead.

The proportion of women in this study practising contraception (48,8%) corresponds almost exactly with the figure reported by the Medical Officer of the Cape Divisional Council for 1984.[4]

A study on women attending antenatal and family planning clinics in Cape Town showed a similar rate of use.[7] While the proportion of fertile females using contraception varies from area to area in South Africa, data from some areas in developed countries, for example the West Suffolk Health Authority in England where only 31% of the 'at risk' females (those between the ages of 15 and 44 years) used contraception, suggests that low levels of contraception are not peculiar to women in this country.[8]

The geatest proportion of women using contraception were found in the older groups. At the same time, the proportion of teenagers using contraception in this study (19,5%) was slightly higher than the 14,2% found by Van Tonder in a countrywide survey of clinic attenders in 1978.[9]

The method chosen is directly related to the way in which it was presented

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The finding that 51,6% of the subjects in this study used no contraception is significant even though the level of sexual activity and the number of post-menopausal women were not established. As not all the non-users may have been sexually active at the time of the interview and were therefore strictly speaking not 'at risk,' the rate of use in those truly 'at risk' is therefore likely to be higher than 48,4%.

Side-effects, such as irregular bleeding and headaches were cited as the reason for non-use of

contraception in a certain proportion (12%) of non-users. Careful monitoring of side effects accompanied by tailoring the method to the individual may assist in encouraging these subjects to continue with contraception.

As was found in other studies [2,7,10] very few males used any form of contraception in the group under study. This is an area that needs attention.

Teenagers mostly used injectable hormones

Extensive studies in India, Korea the Phillipines and Turkey have shown that the method of contraception chosen was related directly to the way in which the different methods of contraception was presented. The pattern of use of contraception in this study probably reflects the way in which the different methods were offered to the subjects. The fact that only 38,3% of the users of contraception chose the method of their own free will underscores this fact. Factors such as the subjects' knowledge and attitudes, information provided and the attitudes of the providers have been shown to influence the choice of method.[11]

The trend to use tubal occlusion in patients over 40 years reflects good contraceptive practice in view of the increased risk of circulatory complications with hormonal methods, especially in smokers in this age group,[12].

Teenagers, most of whom were on injectable hormones, were found to be poor attenders in a study at the local Family Planning Clinic.[10] It is possible that injectable hormones are being prescribed by the service providers in view of the poor attendance by teenagers. It may well be that the method and its side effects leads to dissatisfaction and subsequent non-attendance. Teenagers may be less tolerant of side effects and this may affect compliance. Therefore the method of contraception needs to be considered particularly carefully in these young women. The importance of pre-treatment counselling and continued reassurance cannot be overemphasized.

However, there is no ideal method of contraception for teenagers who sometimes prefer not to use the oral contraceptive for fear of being 'found out' by disapproving parents.

The lack of a statistically significant relationship between socio-economic status and contraceptive method suggests that the method prescribed was not influenced by the individual's level of sophistication.

Oral contraception combined with smoking, increase the risk of cardiovascular mortality four times

The high prevalence of side effects in this study may be due to bias as the subjects were attenders at a general practice. The fact that 90,4% of users were satisfied with the method of contraception in spite of side effects in 70% of users, suggests that women have come to expect that contraception leads to side effects.

One third of subjects on oral contraception smoke, a combination that has been shown to increase the risk of cardiovascular mortality four times in the United Kingdom.[12] This potentially lethal combination is a cause for concern and patients on oral contraception should be actively discouraged from smoking.

The monitoring of Blood Pressure in the subjects in this study was excellent, reflecting good contraceptive practice by the service providers. The risk of hypertension as a side-effect of contraception is thereby reduced.[13]

The pattern of contraception usage found in this study suggests that providers of the service should take cognisance of the uniqueness of the individual and the importance of pre-treatment counselling and continuous monitoring in prescribing any form of contraception. To improve this service more research is needed in the area of compliance as it relates to contraceptive methods, influenced as these are by side effects, client-provider relationships and knowledge and attitudes of both client and provider.

Aknowledgements

The patients who so willingly participated in the study and Dr A Mitha who allowed access to his practice, are thanked most sincerely.

Drs M Hoffman, D Whittaker, J T Mets and J E Myers are thanked for their useful comments and Dr K E Sapire is thanked for her valuable criticism.

References

1. Sapire K E. The present status of Family Planning. S Afr Med J 1988; 74: 2-3.

2. Mostert W P, Erasmus G. Streeksverskille in fertiliteit en kontrasepsie onder Indiërs, Kleurlinge en Swart Suid Afrikaners. HSRC (sn-253), Pretoria. 1986.
3. 1985 Census. Central Statistical Service. Pretoria.
4. Annual Report of the Medical Officer of Health, Cape Divisional Council, 1985.
5. Schlemmer L, Stopforth P. A guide to the Coding of Occupations in South Africa. Fact Paper No 4. Centre for Applied Social Sciences, University of Natal, 1979.
6. Groenewald H J. Fertiliteit en Gesinsbeplanning in Hanover Park. HSRC: Pretoria, 1976.
7. Roux A. Family Planning among a group of women. S Afr Med J 1984; 65: 898-901
8. Schopflin K E. Community Family Planning Clinics: An Evaluation. The Practitioner 1983; 227: 829-31.
9. Van Tonder, J L. Die demografiese profiel van kliënte van gesinsbeplanning klinieke: Junie 1978. Pretoria, RGN, 1980.
10. Pick W M. Family Planning at Ravensmead Clinic, 1986. (Unpublished Report).
11. WHO Task Force on Psychosocial Research in Family Planning. Studies in Family Planning 1980; 11(9/19): 267-73.
12. Royal College of General Practitioners' Oral Contraception Study. Mortality among Oral Contraceptive users. Lancet 1977; Oct: 727-30.
13. Cook N R, Scherr P S, Evans D et al. Regression Analysis of Changes in Blood Pressure with Oral Contraception Use. Am J Epidemiol 1985; 121 (4): 530-9.

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