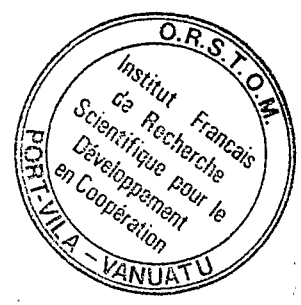


Doc 1567



OFFICE DE LA RECHERCHE SCIENTIFIQUE ET TECHNIQUE OUTRE-MER
(a French overseas scientific and technical research
organisation)

PORT VILA REGIONAL OFFICE



ANTHROPOLOGY

CASE STUDY NO. 4

SEPTEMBER 1985

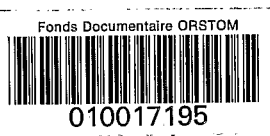
NOTES ON THE FERTILITY OF APMA WOMEN

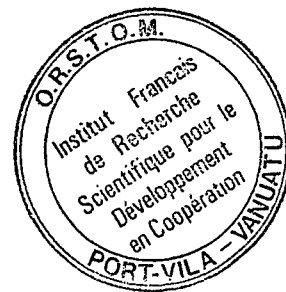
(POPULATION DATA TAKEN FROM MELSISI CATHOLIC MISSION RECORDS)

ANNIE WALTER

ORSTOM REGIONAL OFFICE
P.O. BOX 76
PORT VILA
VANUATU.

Fonds Documentaire ORSTOM
Cote: Bx 17195 Ex: 1





CONTENTS

INTRODUCTION.....p. 3

RESULTS.....p. 5

1. Age at first marriage.....p. 5

2. Family sizes.....p. 7

3. Age at first pregnancy.....p. 9

4. Birth intervals after the first child.....p. 11

CONCLUSIONp. 13

REFERENCE MATERIALp. 15

INTRODUCTION

V In 1983, I carried out a population survey of the Apma-speaking people of central Pentecost to obtain the quantitative information needed for a medical anthropology survey revolving around concepts related to human reproduction in the region.

The population study was based on an analysis of the 1957 and 1979 censuses, genealogy, comprehensive interviews with women in villages and on Melsisi Catholic Mission records (1) providing civil registration for parishioners albeit in a patchy way until 1960 and more methodically from then onwards. This paper contains the results obtained after processing and analysing these registers.

-
1. I would like to thank the Melsisi Catholic Mission and Father Caillon who allowed us to consult their registers as well as Miss Alfreda Mahon Lala who processed them.

Children were baptised within a few months, if not weeks, of birth. Christening dates, which were always given on baptism certificates, were checked against Melsisi maternity clinic registers. It did not appear as if many omissions of infant deaths had been made, if at all, as the children concerned were nearly all registered at birth or baptism. Birth tables were therefore not corrected accordingly. Later deaths, however, were registered in such a way that it was impossible to process the data. Marriage registers had been kept meticulously ever since 1960 with the date and each person's birth place. Birth dates were checked against or sometimes supplied with less certainty by Melsisi maternity clinic birth certificates or electoral rolls.

An index of 238 cards was drawn up using this information, each card showing the following information;

- couples dates and places of birth ;
- marriage date and serial number ;
- birth dates of all the couple's children.

70 index cards supplied some extra information concerning one or other of these persons.

The index dealt only with couples married between 1/1/1963, and 31/12/1982 and births occurring within the same period.

All calculations were for complete years.

The population dealt with in the analysis represented a limited and specific sample of the total Apma population. The latter consisted of 4304 people in the 1979 census, 58.1% of which were Catholic (1) and only Catholics were studied in this survey. Almost all spoke the Surimarani dialect and the only people selected were married between 1/1/1963 and 31/12/1982 (i.e. 1290 persons (2), including children).

Figure 1, ^{was} the Apma population age pyramid, obtained from 1979 census data for 4211 inhabitants, as it was impossible to analyse the ages of the 93 remaining people who were very thinly spread over small localities.

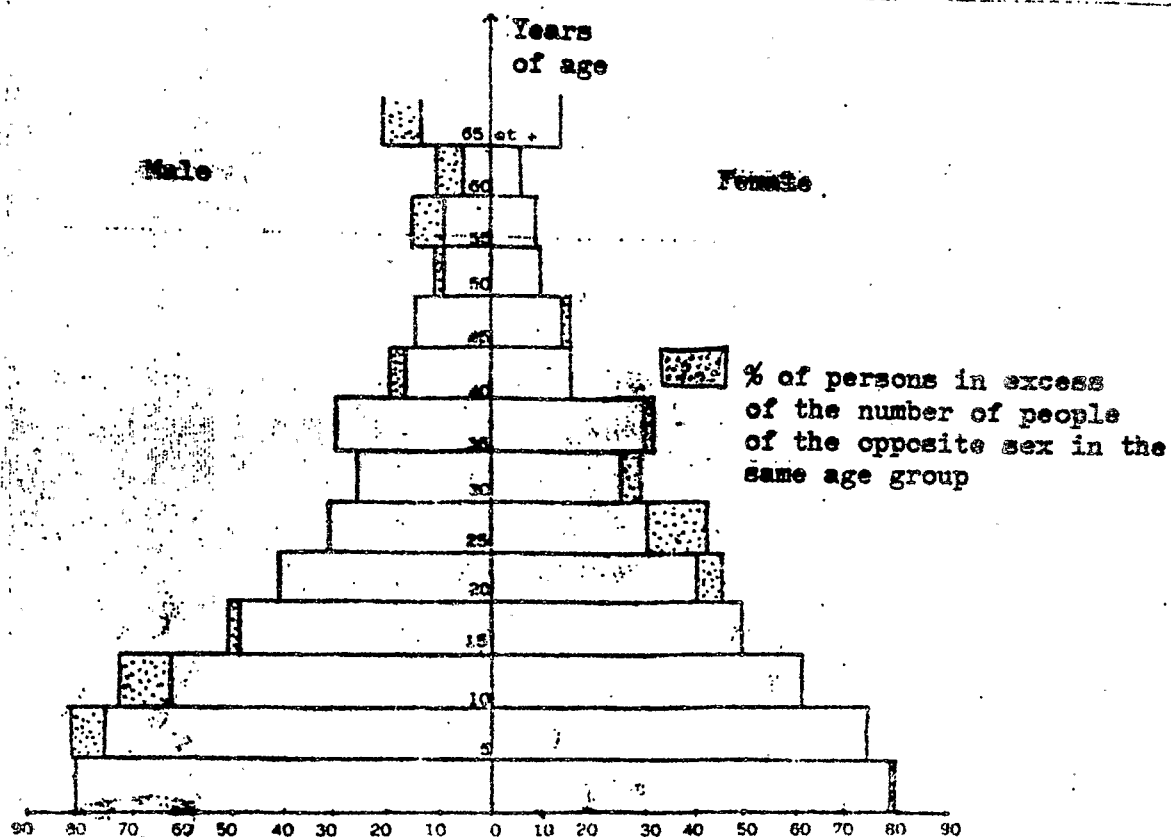


Figure 1 : The Apma population age pyramid.

- 1- The vital statistics of persons belonging to other religious sects were spread out over several villages and were therefore not processed.
- 2- Information on earlier generations was obtained from mainly genealogical sources.

THE RESULTS

1. Age at first marriage

The various average ages at first marriages of the different Apma age-groups are given in table 1.

Table 1 : Average age at 1st marriage according to Apma age-groups.

Age-group	Women	Men
1942 and before	not calculated	26.4
1943 - 1947	20.9	24.6
1948 - 1952	20.5	23.1
1953 - 1957	21.4	23.1
1958 - 1962	19	20.9

Women therefore married later than they used to and men earlier. It has been shown elsewhere (1) that the transition occurred in the post-war years and was due to the twin effects of Christianisation and historical events.

-
1. A. Walter - 1985 - L'épouser hier et aujourd'hui - quelques notes sur les stratégies de mariage à Vanuatu - Anthropologie, Document de travail n°5-ORSTOM-Port Vila - rerevised (to be published) (translated as Getting Married Yesterday and Today - notes on marriage strategy in Vanuatu - Anthropology-Case Study no. 5.)

Christianisation brought about a radical change in marriage strategies by forcing men to give up polygamy and become monogamous. Modernisation, which afforded other sources of power, by undermining customary male powers and introducing education, enabled men to marry younger, while leaving a greater number of women available. Formerly, girls would be married off at puberty to men who, on average, were 7 or 8 years older than they. In addition, customary chiefs were entitled to reserve their wives' younger sisters for themselves.

Education offered by the missions enabled adolescent girls to postpone their marital obligations for a few years.

These results corroborate those obtained by J.L.Rallu on Vao in 1982 (cf. table 2).

Table 2 ; Average ages at first marriages in terms of age-group on Vao, 1982 (according to J.L.Rallu, 1982).

Age-group	Men	Women
1911 - 1920	27.8	17
1921 - 1930	27	18.9
1931 - 1940	27.8	18.2
1941 - 1951	26.1	19.1
1951 - 1960	not calculated	19.8

2. Family sizes

Women aged 35 to 39 had an average of 4.6 children (cf. table 3). These women, however, were still young and the mission record data gave little information on children born to women who had come to the end of their reproductive lives.

Table 3: Average number of children born to women of each age group (Melsisi Catholic Mission record data.)

Age on 31/12/82	number of women	number of live births	average number of children per woman
15 - 19	1	0	not calculated
20 - 24	47	44	0.93
25 - 29	87	161	1.85
30 - 34	66	228	3.45
35 - 39	48	221	4.6
Total	256	674	2.58

A study of the total number of children in terms of the length of married life produced similar results. Women married for twenty years or more had an average of 4.45 children. These figures, obtained from parish data, are in fact slightly lower than those that can be had from other sources (cf. table 4) and are given for information purposes only, especially as they cannot be usefully processed.

Table 4: Family sizes according to mothers' ages - various available sources -

Womens' ages (at time of survey)	Vanuatu	Personal Survey 1983	W H O 1984 Survey CD II
(20 - 24)	1.24	2.4	1.33
(25 - 29)	3.01		2.65
(30 - 34)	4.68	4.1	4.01
(35 - 39)	5.66		4.68
(40 - 44)	5.98	6.6	5.67
(45 - 49)	6.28		6.09
(50 - 54)	6.19		
(55 - 59)	6.06	7	
(60 - 64)	5.98		
(65 and over)	5.15		

The 1967 census gave indigenous women as having an average of 5.98 children for the 40 - 44 year-old generation and 6.28 children for 45 - 49 year-olds.

A recent survey conducted in 1984 by WHO (1) showed that women nearing the end of their reproductive periods in district II, which includes Pentecost, had 5.67 deliveries for the 40 - 44 age group and 6.09 deliveries for the 45 - 49 age group.

Doctor Heather Booth (2) estimated total fertility at 6.75 children per woman, according to 1967 census data, and 6.5 children per woman according to 1979 census data for the 1973-1978 period.

1. Report on the maternal and child health survey of Vanuatu. Ministry of Health, Vila, Vanuatu 1984 - 119 p.p. The results of this survey should apparently be treated with considerable caution.
2. Heather Booth is an SPC expert in population data processing. The information quoted here was obtained on a personal basis.

In other surveys, conducted by interview, the same figures of 6.6 deliveries and 5.8 live births were obtained for women aged 40 to 49 in 1983(1). These figures are very similar to those obtained by H. Booth in her analyses. Interviews revealed that the ideal family for an Apma women consisted of 6 children divided equally between the sexes and alternating with each birth.

3. Age at first pregnancy

The average age at first pregnancy increased by slightly more than a year for women married after 1973, compared with those married before (table 5).

Table 5: Average age at first pregnancy in terms of marriage date (Melsisi Catholic Mission record data)

Marriage date	Number of women	Average age at first pregnancy
1/1/1963 to 31/12/1972	109	21.2
1/1/1973 to 31/12/1982	133	22.6

V This is partly due to women's marrying for the first time at a later date. The average interval between marriage and the first legitimate childbirth is shorter for women married between 1/1973 and 12 /1983 (cf. table 6).

(1) These interviews were conducted with 103 married women spread over 16 villages. Due to the precise nature of the interview and ready co-operation from the women, it was possible to detect miscarriages and infant deaths with a low error margin.

Table 6 : Average interval between marriage and first child in terms of marriage date (Melsisi Catholic Mission record data).

Marriage date	Average interval between marriage and first pregnancy
1/1/1963 to 31/12/1972	18.7 months
1/1/1973 to 31/12/1982	16.8 months

The interval for this period is even shorter than it appears and drops to 13.7 months if the paradoxically high number of first pregnancies after 4 years of marriage is excluded (1).

It was calculated that 43% of women married between 1/1/1963 and 31/12/1972 were first expectant in the second year after marriage, and 37% before their twelfth month of married life. 54% of women married between 1/1/1973 and 31/12/1982, however, were first expectant in their first year of marriage.

It should also be pointed out that premarital pregnancies were and still are fairly unusual, though they have tended to increase in the last few years.

1 - It was always checked whether the first-born child was from the first pregnancy. A degree of error remains, however, and could be partly due to these late pregnancies. At the time, some couples migrated to other islands and their first-borns were registered in other archives.

4. Birth intervals after the first

Nowadays, young women spaced out their pregnancies less than their elders did. The birth interval has thus dropped overall from 40.9 months, for women aged 40 to 44 years, to just 28.7 for women aged 25 to 29.

The narrowing gap applies to all births, whether between the first and second child or the third and fourth (cf. table 7).

Table 7 : Birth intervals according to age-group (Melsisi Catholic Mission record data).

(Mother's age)	Number of women	Number of intervals	1/2	2/3	3/4	4/5	5/6	Average int.
(20-24 yrs:	10	14	30	18.3	16			21.4
(25-29 yrs:	51	80	27.3	30	27.6	30		28.7
(30-34 yrs:	57	145	31.3	31.9	37.3	33.2	31.7	31.6
(35-39 yrs:	43	154	32.7	36.7	35.3	39.7	34	35.7
(40-44 yrs:	5	14	33.2	48.3	49.3	39	35	40.9
(TOTAL	166	407	30.9	33.1	36.3	35.5	33.5	32.7

Formerly, a couple could not have sexual intercourse again until their child had been weaned. After about two years, when a mother felt that her child was strong enough, could walk, had teeth, had started walking, and, most importantly, willingly ate solid food (taro and yam), she would allow her husband to have sex with her again, although she would still carry on

breast-feeding her child. A child was considered as being weaned once its mother was pregnant again.

The transition from polygamy to monogamy, the fact that married couples started actually living together and the trust put in modern medical assistance led young couples to shorten the gap between births. It has, however, been noticed that expectant mothers' nutrition is not always suitable in Vanuatu (1).

The narrowing birth interval could rapidly exhaust young mothers both because of pregnancies in too rapid a succession and the increased workload brought about by having to bring up 2 or 3 small infants at the same time.

1- M. Hung, National Nutrition Survey Report - October 1983 - pp15-21.

CONCLUSION

Women now marry at about 21 years of age, and therefore later in life than before. They start their reproductive lives very soon and are pregnant within their first year of marriage. Their mothers and grandmothers, who often married at puberty, waited several years before giving birth to their first children. Age at first pregnancy has changed by only a year at the most. Very little information is available on puberty age variation. Several surveys were conducted on the subject by interviewing women and checking their replies by various means. The limited sample that could be processed consisted of only 55 women and showed an unusual one-year increase in puberty age (menstrual period) from 13.8 for the 1934-1943 age-group to 14.9 for the 1954-1963 age-group. The interval between puberty and the first marriage thus increased from 3.8 years in the 1934-1943 age-group to 5.6 years in the 1954-1963 age-group.

Premarital pregnancies were and still are relatively unusual in Central Pentecost. They are, however, much more common on some other islands and in Port Vila where young people are more emancipated. Marriages are very stable and the number of divorces is negligible.

Births ~~to~~ ^{used} follow each other by about three years after the first child, with protracted breast-feeding periods for the youngest child and form of contraception other than abstinence. By the end of her reproductive life, a woman would have given birth to 6 or 7 children, some of whom would die in infancy. Nowadays, births follow each other in more rapid succession, about every two years, and infant mortality has dropped considerably. Young women say they want no

more than 4 children. This state of affairs has created a new demand for contraceptive methods other than abstinence. These methods, however, are meeting with low tolerance, if the constant complaints of the few users of oral contraceptives are to be believed.

Finally, it has been demonstrated in an earlier work that individual strategies diversified considerably during the 1940's. Before that, almost all women would marry at the same age and space out their pregnancies at regular intervals so as to have the same number of months between children. The interval varied little from one group to another. Nowadays, women are moving away from the traditional, collective pattern and, to some extent, are working out their own reproduction strategies.

REFERENCE MATERIAL

- M. Hung, 1983, National Nutrition Survey Report 30pp.
- J.L. Rallu, 1984, "Quelques données sur la population d'une île du Vanuatu (Vao, Nord-Malekula)" population, no.1, 183-186.
- 1967 Population Census Report, New Hebrides Condominium, 488pp
- 1979 Population Census Report, Volume 1: Basic Tables, National Planning and Statistics Office, Vila, Vanuatu, June 1983, 470pp.
- Report on the Maternal and Child Health Survey of Vanuatu, Ministry of Health, Vila, Vanuatu, 1984, 119pp.
- A. Walter, 1983, "Recueil des savoirs et des faits concernant la procréation dans une société mélanésienne". Etat d'avancement des travaux et notes méthodologiques. Anthropologie - Document de travail No 2, ORSTOM - Port Vila, roneoed, 74pp.
- A. Walter. 1985 L'épouser hier et aujourd'hui. Quelques notes sur les stratégies de mariage à Vanuatu. Anthropologie, Document de travail no 5, (Translated into English as "Getting Married Yesterday and Today. Notes on marriage in Vanuatu. Anthropology. Case study no.5) ORSTOM, Port Vila, roneoed (to be published).