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**DEMOGRAPHIC BEHAVIOUR IN
THE COOK ISLANDS:
RESULTS FROM A RECENT SURVEY**

by

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The views and opinions contained in this Discussion Paper
have not been officially cleared and thus do not
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Preface



The UNFPA Country Technical Services Team (CST) for the Pacific, based in Suva, Fiji Islands, is one of eight regional teams established by the United Nations Population Fund to provide countries with technical assistance and information to build country capacity. In fulfilling this function, the Country Technical Services Teams undertake field missions and, together with national experts, carry out policy and programme-related research and analysis.

This Discussion Paper Series has been initiated by the CST (Suva) in an attempt to establish a dialogue among national population programme personnel on the integrated and multidisciplinary approach to population and development issues. The Discussion Papers are addressed to both practitioners and academic audiences.

This Discussion Paper analyses the results of a Knowledge, Attitudes and Practices (KAP) survey conducted in the Cook Islands in 1996. The report examines in detail the unmet need for family planning and provides information on the decision-making process regarding fertility behaviour. It underscores the gap between knowledge of a family planning method and the effective use of that method. The findings of the Cook Islands KAP Survey indicate the need for more extensive information and communication activities, with particular attention directed to the needs of adolescents.

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Catherine S. Pierce
Director

1. Introduction

Overview

The self-governing territory of the Cook Islands consists of 15 islands and atolls that are spread over 2 million sq. kms. of the South Pacific Ocean. The islands are geographically divided into two groups, the Northern and Southern Group islands, and display marked differences in social, cultural and economic activities. The total land area of the country is a little over 23 thousand hectares while its exclusive economic zone covers nearly 2 million square kilometers. Rarotonga, the administrative centre, has a total land area of 6.7 thousand hectares, and is the largest and most populous island with over 50% of the total population of 19 thousand in 1996 (Cook Islands, 1997).

Between 1991 and 1996, the natural rate of population increase was 1.9% annually, but this was offset by significant out-migration to New Zealand such that the realised inter-censal growth rate was only 0.4%.

Social indicators in Cook Islands are very respectable with life expectancy in 1991 at 71 years for males and 74 for females. The infant mortality rate for the period 1991-95 was 11 deaths per 1000 live births (SPC,1998). While the total fertility rate had fallen to 3.3 births by 1991, one worrying concern was the rate of teenage (15-19 year olds) fertility at 77 births per 1000 women, the highest in Polynesia.

Cook Islands Maori make up the bulk of the resident population with 90% of the total; the rest are composed of Part-Maori and aliens. The dominant religious affiliation is with the Cook Islands Christian Church (CICC) followed by the Roman Catholic Church (58% and 17% respectively).

Since schooling in the Cook Islands is free and compulsory up to the age of 15, access to primary and secondary education is universal. Yet, only 2% of the adult population had achieved university level training in 1996 while 14% had received trade, vocational or professional qualifications.

In 1996, the total labour force amounted to just under 6 thousand persons, a fall of 10% since 1991. The total employed population fell by 15% between 1991 and 1996, largely attributable to the downsizing of the public sector, while the rate of open unemployment rose from 8 to 13%.

In the area of reproductive health and family planning, institutional changes have been made at the national level to recognise the reproductive rights of women to freely decide on the number and spacing of children. However, clients are made aware of the disadvantages of too many children and of motherhood at an early age. Nevertheless, there is no discrimination due to the choice a woman makes as to whether she has children or not, her choice of contraceptives or other reproductive health care decisions she makes.

Universal access to reproductive health care services and family planning has been attained and continuing effort is made to eliminate any emerging barrier. Government has addressed the issues relating to adolescent health through community training services and information.

Health policies reflects comprehensive reproductive health programmes. Training in midwifery and other related upskilling ensure that reproductive health care providers are able to meet the required needs.

A number of policy measures have been addressed to the promotion of gender equity and the empowerment of women. Significant changes have taken place in relation to new legislation or as provided for in the laws of the Cook Islands. Some of the positive measures include the creation of a public awareness programme on the laws and conventions on gender issues and equality, including the signing of the Non Molestation Order; the Matrimonial Property Act; the Convention on the Elimination of all forms of Discrimination Against Women; and the Convention on the Rights of the Child.

A review process is in place to consider and amend, where appropriate, legislation which discriminates or disadvantages women (Tamarua, 1998). In 1995, the Cook Islands' Policy on Women was formulated, including a Programme of Action.

Ongoing activities have been established by both Government and non-Government organisations with the support of local communities, which complement programmes of action in the broad area of development.

The formation of the Healthy Islands Committee with representatives of both government agencies and civil organisations is a recognition of the strength that can be derived from such partnerships. It is intended at this stage to strengthen this body with the view of taking on other development programmes, which have bearing on the condition of the population.

A National Development Council was established which makes recommendations directly to Cabinet on economic and financial matters. Even though this body does not address reproductive health issues specifically, its role may change as the reform process achieves its immediate goal.

One significant example of this strengthened partnership is the recent agreement between the Rotary Club, the Richmond Foundation (an international organisation) and the Government through the Ministry of Health for a Programme for a Day Care facility for the mentally sick and the elderly.

Meanwhile, the Women's Counselling Centre (Panunga Tauturu) plays the lead role in issues of violence against women and has the support of government. This, however, needs to be consolidated so that the programme can be sustained. There is a need for men to be actively involved as they can play a significant role by working with women, who actively contribute in addressing violence in society.

There is a plan to be implemented to strengthen gender equity through awareness programmes, which will sensitise sectors of society at large. This is anticipated to overcome

some of the misunderstanding by both men and women since population issues involve everyone, whether they be reproductive health matters, sexual health, violence against women or children or gender discrimination.

The Knowledge, Attitudes and Practice Survey (KAP)

The KAP survey in the Cook Islands was conducted with the aim of gathering basic information on respondents' knowledge and practice of family planning and sexual health, and their access to family planning services. Both males and females were interviewed and rural and urban locations in selected areas were covered. The intention was to ensure widespread coverage in order to capture a degree of national representation. The male dimension was added to what used to be a purely female subject matter.

Sampling Design

After having reviewed all available options and having considered both technical requirements, practicality and budget constraints, simple random sampling procedures were accepted. In specific instances, sampling proportional to size was implemented. The country was divided into two main divisions of urban and rural areas. The urban was made up of Rarotonga and the other islands classified as rural.

While respecting the need for representativeness, logistics and cost considerations limited the choice of outer islands to only two. For the purpose of illustrating the sampling methodology with the figures provided by the Statistics Office, the islands of Rarotonga, Mangaia, and Mauke are shown below.

Based on the estimated figure of about 4200 women on the islands as at 1996, it was decided that, given the logistics involved and the budget constraint, information gathered from about 300 women would be feasible. The sampling fraction (1/f) would therefore be vary between 1/12 – 1/14.

Place	Males (15-59)	Females (15-49)	Private Dwellings
Rarotonga	3107	2608	2569
Mangaia	273	217	237
Mauke	172	158	133
Cook Islands Total	5141	4231	4153
Total to be interviewed	150	300	

The estimates of women to be interviewed were as follows:

Estimated Women (CBA)/Total number of CBA * 300

Therefore,

(i) Rarotonga, 2600/4200 = 186

(ii) Other outer islands, 1600/4200 = 114

These others would now be proportionally allocated to the islands as follows:

(i) Mangaia, 217/375*114 = 66

(ii) Mauke, 158/375*114 = 48

Total = 114

Total (Both urban and rural) = 300 (186+114)

The same procedure was utilized to select the male respondents. It had been decided that because of the costs involved in the research, the number of male respondents would be about half that of the female.

2. Analysis of The Cook Islands KAP Survey

Demographic Behaviour: Some Theoretic Underpinnings

Before beginning the analysis of the KAP survey in Cook Islands, it is worthwhile to consider the underlying theory of fertility behaviour according to the new household economics and its disciples. The theory of household decision-making considers households to be rational in attempting to maximize their welfare or well being subject to a number of constraints. Children are viewed in a similar manner as other “commodities” and the demand for children is dependent on the relative preferences for children and their relative costs compared with other goods. Cross-section variation in fertility is attributed primarily to differences in the relative value of human time, particularly to the opportunity costs of women’s time that is thought to constitute a substantial share of the total costs of child rearing (Schultz, 1981).

In relatively less-developed countries such as Cook Islands, however, this demand-oriented approach is viewed as being too simplistic for a number of reasons (Anker and Knowles, 1982). The economic contribution of children in farm work and child-minding activities is largely ignored in the theory, yet it can be considerable and, together with an obligation to care for parents in old-age, provides an important incentive for high fertility. The approach also ignores factors such as poor health, high rates of infant mortality and cultural constraints which affect the supply of children and which may result in desired fertility being greater than that which is capable of being attained (Cohen and House, 1994).

In the following analysis of inter-personal demographic behavioural differentials in Cook Islands, a large number of the determinants that the theory of household decision-making suggests are important, are considered. In an extensive literature, more education for the mother is usually believed to proxy for the increased value of her time in wider labour market opportunities and to influence her tastes and preferences by enhancing her desire for material goods and leisure, time uses which compete with the care of children. Education may also improve the quality of infant and childcare, reducing the need for high fertility to ensure a minimum surviving family size. Labour market activities performed outside the home are introduced into the analysis as an additional proxy for the cost of child bearing. Socio-cultural differences in the demand for children are represented by variables denoting island of residence; and knowledge of family planning methods to reduce fertility are included as a factor to be explained and as a determinant of fertility behaviour. Finally, it is essential to control for life-cycle variation in fecundity by accounting for the age of the respondents. While respondent households face different budgetary constraints which help to determine their demand for children and other goods and services, the survey instrument made no

attempt to collect household income nor proxies for economic differentiation between households.

Departures from a natural fertility regime will occur through behavioural changes, particularly through the adoption of efficient family planning methods. Family planning indices were developed from questions about whether the female respondent had ever heard of any method of family planning to prevent childbirth and whether any method had actually ever been used.

The Survey Results: Females

The KAP sample survey in Cook Islands contained twice as many female as male respondents and the two gender-based data sets were analyzed separately.

Knowledge of Family Planning

Table 1
Percentage of Female Respondents Who Have Heard and Know How to Use Family Planning Methods

Method	Heard Of	Know How to Use
Any Method	97	-
Condom	84	35
Pills	91	74
Calendar	25	12
IUD	58	26
Norplant	48	19
Injection	88	64
Female Sterilization	51	20
Male Sterilization	37	11
Withdrawal	16	11
Abstinence	16	11
Emergency Pills	17	10
No. of Observations	315	315

Source: Cook Islands KAP Survey

Our analysis reveals that 97% of women and 91% of men know of at least one contraceptive method. The pill, injection and condoms were the most widely known methods; male and female sterilization, Norplant and emergency pills were among the least known “modern” methods; and “inefficient” methods such as calendar and withdrawal were the least known of all methods. Table 1 also demonstrates wide disparities between the percentages of women who have heard of a particular method and actually know how to use the method. The share of women who know how to use condoms, IUD, Norplant and female and male sterilization are surprisingly low at one-third or less. In table 2, while 85% of 15-19 year old women have heard of the condom, only 1 in 5 (compared with 1 in 3 of all women) know how to use the contraceptive. This result is particularly disturbing when it is such younger women who are likely to be most exposed to the threat of HIV/AIDS from unprotected sex. Evidently, much

more effort is required to demonstrate to the women of the Cook Islands how to use alternative modern methods of contraception apart from the pill and Depo Provera.

Respondents were asked how they had heard of family planning. The most cited source of information was health workers (84% of all women), followed by friends (46%) and family (41%), and radio (37%). Printed materials – books, newspapers, pamphlets and posters – were cited by less than 30% of respondents. It would seem that health workers are the principal source of information on family planning but need to be more specific in explaining how each modern contraceptive method works.

Table 2
Percentage of Females Who Have Heard of and Know How to Use the Principal Contraceptive Methods by Age Group

Age	Method					
	Condom	Pills	IUD	Injection	TL	Emergency Pills
<u>Heard Of:</u>						
15-19	85	93	35	78	25	7
20-29	88	93	55	92	48	17
30-39	79	91	65	89	60	20
40-49	84	92	78	90	68	22
All	84	92	58	88	51	17
<u>Know How to Use:</u>						
15-19	22	51	7	42	4	4
20-29	38	83	15	68	10	8
30-39	40	80	33	70	29	12
40-49	32	72	56	72	46	16
All	35	74	26	65	20	10

Source: Cook Islands KAP Survey

Table 3
Percentage of Females Who Have Heard of and Know How to Use the Principal Contraceptive Methods by Island Group

Island	Method					
	Condom	Pills	IUD	Injection	TL	Emergency Pills
<u>Heard Of:</u>						
Rarotonga	84	90	65	87	53	25
Mauke	79	91	30	86	39	4
Mangaia	86	96	63	92	55	7
All	84	91	58	88	51	17
<u>Know How to Use:</u>						
Rarotonga	45	81	32	64	21	16
Mauke	14	65	11	60	25	0
Mangaia	24	63	21	69	15	1
All	35	74	26	65	20	10

Source: Cook Islands KAP Survey

Table 3 portrays quite wide disparities in knowledge of, and how to use, the principal contraceptive methods. Compared with the national averages, Mauke's knowledge of the IUD and female sterilization, or tubal ligation (TL) is poor. Mauke and Mangaia to some extent, are also deficient in their knowledge of how to use some of the principal contraceptive methods. Clearly, the islands outside of Rarotonga need to sharpen their focus on imparting information about, and how to use, important contraceptive methods.

Studies from around the world have often revealed that educational attainment is an important determinant of the level of knowledge about and use of contraception. However, our sample of women from the Cook Islands is dominated by those with secondary level education at 90%; hence it would be difficult to identify any demographic behavioural relationships across education levels from this survey.

Current Use of Family Planning

In the Cook Islands KAP survey both male and female respondents were asked whether they were currently practicing family planning and, if so, which methods they were using.

Table 4
Percentage Distribution of Women Currently Using Contraception by Method Mix

	All women (%)	Users Only (%)	Currently Married/In Union (%)	Users Only (%)
<u>“Effective” Methods</u>				
Pill	20.0	33.6	22.6	31.3
Condom	1.9	3.2	2.4	3.3
Injection	17.5	29.4	20.8	28.8
Norplant	3.5	5.9	4.7	6.5
IUD	2.2	3.7	3.3	4.6
Female Sterilization	8.3	13.9	11.3	15.7
Total “Effective”	50.4	89.7	60.4	90.3
<u>“Ineffective” Methods</u>				
Calendar	1.3	2.2	1.4	1.9
Abstinence	2.9	4.9	2.8	3.9
Withdrawal	1.9	3.2	2.8	3.9
Total “Ineffective”	5.4	10.3	6.1	9.7
Total	53.7	100.0	63.2	100.0

Note: Estimates for the use of individual contraceptives are derived from the separate responses to the questions of whether the method is currently used. Because more than one method might be currently used, the overall estimate of current use need not sum to the total of individual contraceptive users.

Source: Cook Islands KAP Survey

From Table 4, it is estimated that 53.7% of all adult women of childbearing age, and 63.2% of married women or those in a *de facto* relationship, are currently using contraception of one form or another. Meanwhile, 50.4% of all women and 60.4% of currently married women or those in a *de facto* relationship are using an “effective” method. Another 5.4% of all women, and 6.1% of women in some form of union, are using an “ineffective” method.

Of those women using any contraceptive method, one-third are dependent on the pill while an additional 29% use Depo Provera. Almost 14% have been sterilized. Therefore, the family planning programme in the Cook Islands is heavily dependent on just two methods of contraception – the pill and Depo Provera – with tubal ligation being used by many older women who have completed their family formation.

Table 5
Contraceptive Prevalence Rate (CPR) by Method, Marital Status and Age

Age Group	Single		Currently Married/In Union	
	All Methods	“Effective” Methods	All Methods	“Effective” Methods
15-19	18	14	55	55
20-29	60	57	56	55
30-39	35	30	68	64
40-49	-	-	69	64
Total	36	32	63	60

Source: Cook Islands KAP Survey

Table 6
Contraceptive Prevalence Rate (CPR) by Method, Marital Status and Island of Residence

Island	Single		Currently Married/In Union	
	All Methods	“Effective” Methods	All Methods	“Effective” Methods
Rarotonga	40	32	65	61
Mauke	35	35	64	62
Mangaia	28	28	58	58
Total	36	32	63	60

Source: Cook Islands KAP Survey

Tables 5 and 6 examine the contraceptive prevalence rate for all methods and “effective” methods of women, by age group and island of residence. In Table 5, the CPR for all methods and “effective” methods rises with age for currently married women or those in a *de facto* union. For single women, the CPR peaks for the 20-29 age group, the group likely to be more sexually active.

In Table 6, there is little variation in the CPR of married women or those in a union across the islands although Mangaia’s rate lags marginally behind the others. For single women, Mangaia’s CPR lies below the other islands.

Ever Use of Family Planning

All female respondents were asked whether they had ever previously used any method of family planning. Their responses revealed that one-half of current non-users, 74 respondents in total, had practiced some form of family planning in the past. The most popular method previously used by 69% of respondents was the pill, followed by Depo Provera (55%). Less than 10% had ever used condoms, an IUD or Norplant. When asked for the main reason why they had stopped using contraceptives, over one-third said they had suffered from negative side effects while almost 20% had wanted to become pregnant. Other reasons mentioned by less than 10% of respondents were that they were not sexually active and that they became pregnant (7%), indicating, perhaps, contraceptive method failure.

Perception of Service Facilities

Women were asked whether they felt that they have easy access to family planning services in their area of residence. The overwhelming response (89%) was that access is easy; only 5% responded in the negative. On the other hand, when asked how far away is the nearest family planning clinic from their place of residence, 28% of respondents claimed that the clinic is a “long distance” away. Interesting, while a small minority of respondents in Rarotonga (29%) and Mangaia (13%) felt the distance to the nearest clinic was “long”, a majority of women in the sample from Mauke (52%) said the distance was “long”. Despite this perception, the CPR in Mauke marginally exceeds the national average.

Respondents were then asked to enumerate whether certain kinds of contraceptives are available at their clinic.

Table 7
Respondents’ Perceptions of Availability of Contraceptive Methods by Islands (% of Respondents)

Method	% Responding “Available”		
	Rarotonga	Mauke	Mangaia
Pills	91	88	99
Emergency Pills	16	0	1
IUD/Loop	64	2	45
Norplant	61	0	13
Condom	66	4	66
Depo-Provera	64	0	82
Counselling & IEC	43	2	20
Home Visits	17	0	15

Source: Cook Islands KAP Survey

While the respondents’ perceptions of the availability of contraceptive methods at their local clinic may not, in fact, reflect the real situation, these perceptions are important. The authorities may need to check the extent to which perceptions do not reflect the real situation regarding service availability on the ground and, where disparities are wide, take measures to better inform the local population of what is indeed, available. Table 7 demonstrates that the perception, in all three islands, is that pills are widely available. On the other hand, disparities in perceptions are wide between the islands as to the availability of other contraceptive methods. While most methods are believed to be available by the majority of respondents in Rarotonga, this is only partly true in Mangaia, while the perception is that most other methods are not available in Mauke. And emergency contraceptive pills and home visits are believed to be largely unavailable in all three islands.

Again, the extent to which residents of Mauke are misinformed needs to be investigated by the authorities. If their perceptions do not reflect reality, then an intensive awareness campaign needs to be conducted. On the other hand, if a wide range of contraceptive choice is, indeed, not available, the authorities need to make such services more readily available.

Meanwhile, when asked whether they were “happy” with the services they receive at their local clinic, there was a high degree of satisfaction with Mauke (91% “Happy”) leading the

way, followed by Rarotonga (78%) and Mangaia (70%). Very few (only 15 in total) offered a reason why they were not happy with five individuals responding that “information is not confidential”.

Despite the apparent high degree of satisfaction with the services received, 19% of respondents claimed that contraceptives are not always available at the clinic when they need them. Very little difference between the islands in this statistic is apparent.

On the other hand, while 31% of respondents claim to have received family planning counselling at home differences across the islands are wide with Mauke (only 5% visited) at the bottom of the list compared with Mangaia (42%) and Rarotonga (34%). Evidently, the lack of home counselling by health workers¹ in Mauke needs to be examined by the authorities, since it may explain the lack of knowledge of certain contraceptives in Mauke evident in table 3.

3. Estimating the Unmet Need for Family Planning

Many women who are sexually active would prefer to avoid pregnancy but, for various reasons, may not be currently using any method of family planning. These women are said to have an “unmet need” for services of which they are not availing themselves. This concept of unmet need highlights the gap between some women’s reproductive intentions and their contraceptive behaviour (Population Reports, 1996). The measurement of unmet need is of critical importance to planners and policy makers, particularly those in the family planning programme, since it gives an indication of the nature of the challenge required to reach and service such women whose reproductive intentions resemble those of current contraceptive users but who, for some reason or other, are not practicing contraception.

Some of the common causes of unmet need include inconvenient or unsatisfactory services, ignorance and lack of information about what services are available, fears of the side effects of contraceptive methods, and opposition from husbands and other members of the extended family.

Obviously, the identification of the nature and characteristics of unmet need can help the family planning programme to better respond to the demands of these women. A programme strategy focusing on such women as a distinct audience and clientele requires a comprehension of the reasons underlying the unmet need; the determination of the size and composition of sub-groups classified according to their socio-economic characteristics; the prioritizing of certain sub-groups which the programme would be capable of reaching; and the design of a strategy to deliver information and services to meet the essential and specific needs of the various sub-groups.

¹ For the 31% of respondents overall who had been counselled at home, 89% of these had been visited by a health worker.

Invariably, unmet need is defined on the basis of women's responses to survey questions. Those fecund and sexually active women who indicate that they would like to postpone or avoid further childbearing, but also report that neither they nor their partners are using any method of contraception, are said to have an unmet need. The standard formulation has been developed by Charles Westoff (1988 a; 1988b) who defined the group with unmet need as all fecund women who are married or living in union - thus presumed to be sexually active - who are not using any method of contraception but they either do not wish to bear any more children or wish to postpone their next birth for at least two more years. Those who wish to bear no more children are said to have an unmet need for limiting births; those who do not want another child for at least two more years are considered to have an unmet need for spacing births.

Also included in the group with an unmet need are all pregnant women whose pregnancies are unwanted or mistimed and who became pregnant because they were not using contraception. In addition, women who recently experienced an unintended pregnancy but are in a state of postpartum amenorrhea are included in the group with an unmet need.

While the earlier standard formulation does not consider unmet need among unmarried women, assessing this unmet need among young adults is especially important in order to reflect the concerns of the International Conference on Population and Development (ICPD) of 1994. More recently, Demographic and Health Surveys (DHS) have addressed the unmet need of unmarried women.

Figure 1 conceptualises this approach to defining the level of unmet need for family planning. From the KAP survey in Cook Islands, can we measure the extent of unmet need in the country according to this conceptualisation? The short answer is 'no' since the survey questionnaire was inappropriately designed for this exercise. For example, all respondents were not asked whether they are currently amenorrheic nor whether they perceive that they are capable of becoming pregnant i.e. whether they are fecund; whether, if they are pregnant or amenorrheic, the related pregnancy was intended, mistimed or totally unwanted; or whether, if they are fecund, whether they wish to postpone their next birth for at least two years². Nor, indeed, were unmarried women asked whether they are currently sexually active.

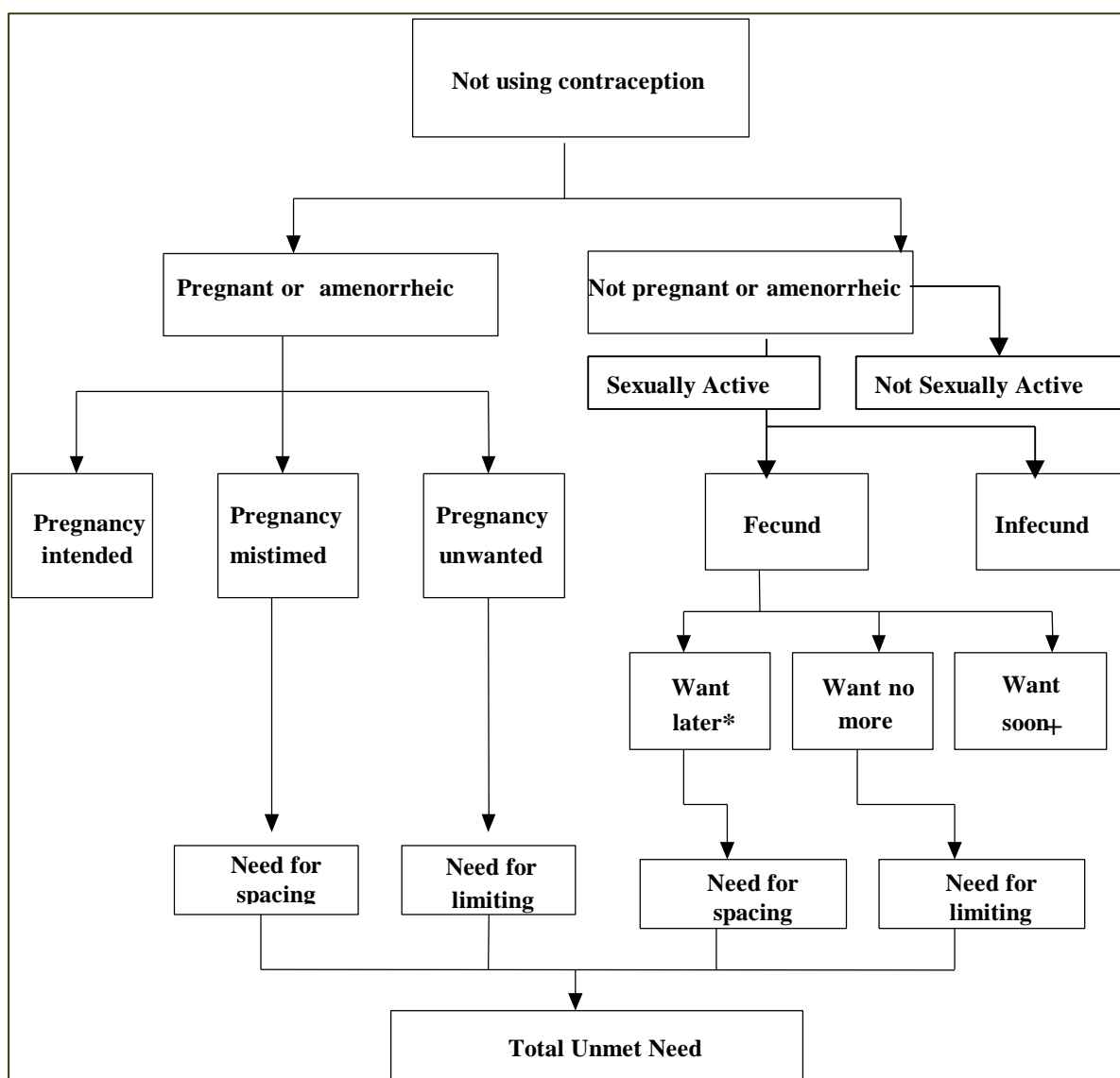
Given the importance of the concept of unmet need, however, it is still worthwhile to use the available information from the KAP survey to derive some measure, albeit incomplete, of the level of unmet need in Cook Islands.

The survey asked women, married or otherwise, whether they had ever given birth to a child and, if so, how many. They were also asked the standard question: "How many more children do you want to have?" Those women who said that they did not wish for any additional births are candidates for having an unmet need for limiting births if they or their partners are not currently using a contraceptive. Unfortunately, as already mentioned, we do not know their current amenorrheic status, nor do we know whether, of those who had been pregnant before, whether they believe they are still able to conceive.

² However, those women who had never been pregnant were asked whether they believed they are capable of becoming pregnant.

However, from additional questions in various parts of the survey instrument, it was possible to subtract from this first approximation those women who indicated that they had been sterilized earlier and therefore, have been classified as currently using a contraceptive. Also subtracted are women who, when asked why they formerly used contraception but did not currently do so, responded that they have entered menopause or that the husband uses an efficient contraceptive method. Women who had never used family planning either in the past or currently, were asked the reason, and those who said they were not sexually active were excluded.

Figure 1: Conceptualising the Level of Unmet Need for Family Planning



*After two years

+Within two years

Source: Population Reports (1996)

According to these definitions our analysis suggests that 27% of all adult women of childbearing age, and 20% of women with a husband or partner, have an unmet need for contraception for limiting the size of their families. Single women, who are generally younger women, have only a negligible demand for terminating future childbearing and their concern will be with spacing children. Unfortunately, because we do not know whether they are reliable sexually active we cannot make any reliable estimate of their unmet need for limiting births.

Unfortunately, the Cook Islands KAP survey does not allow us to measure it, but their more urgent unmet need is likely to be for delaying their first birth and then for spacing births. Indeed, the level of unmet need among sexually active unmarried women may be higher in this sense than among married women. Sexually active, unmarried women, including not only the never-married but also the separated, divorced and widowed, would typically have an even greater stake in avoiding pregnancy than do married women, but, in Cook Islands, they may be less likely to use contraception.

Since our estimate is that 20% of currently married women of reproductive age in Cook Islands have an unmet need for family planning for limiting additional births, these would have amounted to about 350 women in 1996, the year of the last census. If those women who have an unmet need for spacing births could also be incorporated, whose number unfortunately we cannot measure, the level of unmet need among currently married women would likely approach 30% and exceed 500 women³.

How does the rate of unmet need in Cook Islands compare with estimates from other parts of the world? Based on data from Demographic and Health Surveys (DHS) and other comparable national surveys, it has been estimated that about 20% of married women of reproductive age in the developing world as a whole, excluding China, have an unmet need for spacing and limiting births combined (Population Reports, 1996). There is wide variation between regions and countries but the highest rates of unmet need are found in sub-Saharan Africa where the range for married women of reproductive age varies from 37% in Rwanda to 15% in Zimbabwe in the early 1990s. The corresponding contraceptive prevalence rates in these countries were 21% in the former and 48% in the latter. The range of unmet need for limiting additional births only varies between a maximum of 15% in Madagascar to 2% in Niger.

Our estimate of almost 20% of currently married women of reproductive age in Cook islands having an unmet need for limiting additional births is very significant relative to these estimates. Indeed, in most countries, the rate of unmet need for spacing is often 2-4 times greater than the unmet need for limiting births. While the rate of unmet need for spacing births cannot be estimated from the data for Cook Islands, the high estimated rate for limiting additional births indeed suggests that a very significant proportion of women in the country have an unmet need for family planning for spacing and limiting future births.

³ With more in-depth, quality data, women using a method incorrectly or using a method that is unsafe or unsuitable for them could be included in the group with an unmet need. For example, current users may need a more appropriate method because their current method induces side effects, or is perceived to have side effects or because they are using a method best suited to spacing births when their real need is to avoid any further births (Dixon-Mueller and Germain, 1992). Unfortunately, the Cook islands KAP survey data does not allow such fine distinctions.

Socio Economic Characteristics of Currently Married Women with Unmet Need for Contraception for Limiting Additional Births

Table 8
Percentage of Currently Married Women with Unmet Need by Age

Age Group	% With Unmet Need	# Observations
15-19	9.1	11
20-29	13.8	80
30-39	19.7	76
40-49	31.1	45
Total	19.3	212

As would be predicted, the proportion of currently married women with an unmet need for limiting births rises consistently with age. The mean parity of these women with an unmet need rises from 2 children at age 20-29 years to 3.5 for the 30-39 year olds and peaks at 5.6 for the 40-49 year olds.

Table 9
Percentage of Currently Married Women with Unmet Need by Religious Affiliation

	% With Unmet Need	# Observations
Catholic	24.4	45
CCIC	19.3	135
Latter Day Saints (LDS)	14.3	7
Seventh Day Adventists	9.1	11
Other	14.3	14
Total	19.3	212

Source: Cook Islands KAP Survey

According to Table 9, Catholic women have the highest rate of unmet need, followed by followers of the CCIC congregation. Some effort needs to be made to address the special needs of Catholic women whose religion does not promote the use of “artificial” contraception.

As predicted, the extent of unmet need for modern contraception rises with the number of live births borne by the currently married respondent, rising from 16% for those with 2 or fewer births to 19% for those with between 3 and 5 births, and peaking at 31% for those with more than 5 births. Furthermore, the highest rate of unmet need for such women is found in Mauke (26%), followed by Rarotonga (19%) and Mangaia (16%). Again, the earlier finding that Mauke has a higher rate than average of women who may have heard of contraceptives but

do not know how they work, indicates that the family planning programme needs to target Mauke for awareness raising activities.

Decision-Making on Demographic Issues

Respondents were asked a series of questions about the decision-making process in their households over key demographic-related issues. The results indicate an overwhelming degree of joint decision-making with the husband or partner, or the female respondent herself, making the decision. The results are summarised in Table 10. On the basis of this evidence, there is an extensive joint decision-making in Cook Islands and a commendable degree of male involvement in this process.

Table 10
Percentage Distribution of Currently Married Women Making Sole or Joint Decisions on Key Demographic-Related Decisions

	Wife	Husband	Jointly	Other
Decision on Family Size	17	5	75	3
When to Have First Child	26	6	62	6
When to Have Next Child	27	5	64	4
When to Attend Ante-Natal Clinic	74	1	18	7
When to Have Medical Check	71	-	18	11

Source: Cook Islands KAP Survey

Desired Family Size

All respondents were asked, in addition to the number of births they had already borne, how many more children they would like to have. The sum of these responses was interpreted to be their “desired family size”. Table 11 reports the mean desired family size according to various factors.

Table 11
Mean “Desired Family Size” by Various Characteristics of All Women

By:	Mean Desired Family Size
<u>Age Group</u>	
15-19	1.5
20-29	2.6
30-39	3.8
40-49	5.2
Total	3.2
<u>No. of Births to Date</u>	
0	1.0
1	2.0
2	2.9
3-5	4.2
6+	7.2
Total	3.2
<u>Island</u>	
Rarotonga	2.9
Mauke	3.8
Mangaia	3.4
Total	3.2

Source: Cook Islands KAP Survey

Table 11 demonstrates that desired family size rises with the age of the respondent and her current parity. The former result likely reflects a decline in wanted fertility as the concept of a smaller family norm has been accepted by younger women compared with older women who may already have borne many children. In this case, Table 11 shows how higher parity women have a higher desired family size, which may reflect a rationalisation of their past fertility experience. In addition, as might be expected, the more urbanised women in Rarotonga have a smaller desired family size than women from the outer islands.

Survey Results: Male Respondents and Comparisons with Females

From the 163 male respondents, 91% claimed to have heard of family planning. Little difference was apparent across age groups with 15-19 year olds (87%) and 40-49 year olds (85%) having the lowest knowledge; 30-39 year olds (95%) having the most knowledge. The most widely cited sources of this information were health workers (65%), radio (62%) and TV (60%). Printed materials, books (28%), poster (32%), pamphlets (40%) and newspapers (43%) were amongst the least cited sources.

Interestingly, one-third of the sample of men claimed not to be in favour of family planning, two-thirds of whom said this was because they “don’t need it”, hardly a satisfactory reason!

When asked whether they or their spouse currently practise family planning, only 26% of the male respondents said they did. Only 38% said that they or their spouse had ever-used contraception. Since 54% of female respondents claimed to be currently using a

contraceptive (50% using an “effective” method) there seems to be some degree of inconsistency in these replies. While the differences perhaps could be explained by the smallness of the samples, it might also be that the question was not fully understood. Meanwhile, 50% of men claimed that they did not intend to use family planning in the future, perhaps reflecting a degree of hard resistance to contraceptive use.

Table 12
Percentage of Male Respondents Who Have Heard of and Know How to use Principal Contraceptive Methods By Age Group

Age	Method						
	Condom	Pills	IUD	Injection	TL	Emergency Pills	Vasectomy
<u>Heard of:</u>							
15-19	91	43	9	39	13	13	17
20-29	89	60	14	60	23	14	26
30-39	85	60	42	57	35	27	40
40-49	74	59	26	56	30	19	30
50-59	83	72	44	50	28	17	28
All	85	59	28	53	28	20	31
<u>Know How To Use:</u>							
15-19	52	0	0	0	0	0	0
20-29	51	20	3	17	3	6	3
30-39	55	23	10	17	8	7	10
40-49	30	14	4	19	4	0	0
50-59	67	50	6	28	6	6	11
All	51	21	6	16	5	4	6
<u>Ever Use by Self or Partner:</u>							
15-19	9	0	0	0	0	0	0
20-29	14	14	0	11	0	0	0
30-39	28	8	2	8	2	2	0
40-49	7	4	4	7	4	0	0
50-59	6	11	0	6	0	0	0
All	17	8	1	7	1	1	0

Source: Cook Islands KAP Survey

According to Table 12 there is extensive male knowledge of certain methods of contraception (condom, pills and injection) but less than one-third of men admit to knowing of vasectomy, female sterilization, IUD and emergency contraception. There seems to be widespread ignorance of how most of these methods function and extremely limited past use of those methods. Indeed, only 17% of men admit to ever having used a condom, a startling results in an age of the HIV/AIDS pandemic. Evidently, the males of the Cook Islands need to be targeted with information about the principal contraceptive methods available and the benefits for themselves and their families from spacing their children.

Current Use of Family Planning

Table 13
Percentage Distribution of Male Respondents Claiming that They or Their Spouses/Partners Are Currently Using Contraception by Method Mix

	All Men (%)	Users Only (%)
<u>“Effective” Methods</u>		
Pill	3.7	16.9
Condom	3.7	16.9
Injection	3.7	16.9
Norplant	1.2	5.5
IUD	1.0	4.6
Female Sterilization	1.2	5.5
Total “Effective”	13.5	66.3
<u>“Ineffective” Methods</u>		
Calendar	0.0	0.0
Abstinence	2.5	11.4
Withdrawal	4.9	22.4
Total “Ineffective”	5.5	33.8
Total	17.8	100.0

Note: See Note in Table 4

Source: Cook Islands KAP Survey

While only 26% of all men in the sample admit that they and/or their partners are using some form of contraception, this is a much lower level than that indicated from female respondents and reported in Table 4. The reasons for the discrepancy could be numerous, including the small sample size, the unrepresentativeness of the sample, and, perhaps, ignorance on the part of the males about the use of contraceptives by females. Yet, the marital status of the populations by sex are very similar with about two-thirds of both males and females being currently married or in some form of union.

Ever Use of Family Planning

Only 38% of male respondents claimed that they or their spouse had ever used a method of family planning in the past. And only 17% admitted to ever having used a condom; no-one had undergone vasectomy. Only 9% of the 15-19 year olds and 14% of the 20-29 year olds had ever used a condom. The highest ever use of condoms was in the 30 to 39 year olds at 28%. Yet, as illustrated in Table 14, sexual activity begins at an early age in the Cook Islands, with indications that the mean age at first sex has been declining. Admittedly, male chauvinism might give rise to exaggeration, the mean age at first sex for males is only 14 and 37% of female respondents age 15-19 had already given birth at least once. Perhaps this high rate of early pregnancy is not surprising if sexual activity starts so young and condom usage is so infrequent. Again, this is a worrying phenomenon at a time when HIV/AIDS is on the increase in the Pacific Islands.

Table 14
Mean Age at First Sex (Males) and Pregnancy (Females) and % Distribution Never Pregnant by Age Group

	Mean Age* at First Sex	% Never Pregnant to Date	Mean Age at First Pregnancy
<u>Age Group</u>			
15-19	13.4	63	16.3
20-29	15.3	29	19.5
30-39	14.1	8	21.3
40-49	14.1	0	19.8
50-59	15.3	-	-
Total	14.4	100	20.0
# Observations	119	62	251

Note: * 26 males (22%) claimed to have had their first sexual encounter at age 12 or lower, giving rise to some skepticism as to the reliability of the replies to this question.

Source: Cook Islands KAP Survey

While male use of contraceptives seems to be quite low, this cannot be attributed to the unavailability of contraceptive services given the revealed perceptions about the availability of such services. For example, of those giving a valid response, 77% of men said they have easy access to family planning services. Yet only 42% said condoms are available at this service outlet. In Mauke only 38% said they are available; but this is 48% in Mangaia. The authorities may need to examine whether, indeed, this is a fair reflection of the limited availability of condoms at public service outlets which may impede greater condom use.

It is revealing to note that, when men who had never used contraceptives were asked for the reason, 37% said they did not know about it (15% of all men) while 38% (15%) said their wives/partners are using it. The former result suggests the need for more intensified awareness-raising to inform males of the health and economic benefits of family planning.

Decision-Making on Demographic Issues

Men were asked whether they “normally” discuss issues relating to family size with their spouse. While 18% did not reply, 59% claimed that they hold discussions on this subject while 55% said decisions on family size were reached jointly. Nevertheless, a hard core of one in five claimed that they alone made such important decisions. And, of these, one in three was aged 15-19, suggesting that they were reflecting their views about how such decisions would be made in the future, given that very few of them had a wife or stable partner. Evidently, more awareness-raising and IEC activities need to be undertaken in the Cook Islands to promote the ICPD POA objectives of gender equity and equality, especially in family decision-making.

Desired Family Size

It is revealing to note that 100% of currently married men, and 89% of those in a stable union, claimed to have fathered at least one child. It is also revealing to note that 16% of single men had fathered a child although none of the 23 single men aged 15-19 admitted to this. On the other hand, as might be expected, 20% of 15-19 years old single women and

64% of 15-19 year olds in an informal union had already given birth. Evidently, childbearing begins early in the Cook Islands and much of this reflects high desired family size. While the number of observations are few, the desired family size, even for 20-29 year old married men or those in union, exceeds 3.5 children.

Table 15
Achieved and Desired Family Size of Males, by Marital Status and Age Group

	Currently Achieved Family Size		Desired Family Size	
	Married/In Union	Single	Married/In Union	Single
15-19	-	0(23)	-	3.0(23)
20-29	1.7(19)	0.8(16)	3.6(19)	3.0(16)
30-39	3.3(54)	0.8(6)	3.5(54)	1.8(6)
40-49	4.0(22)	1.5(2)	4.1(22)	0.0(2)
50-59	6.6(15)	0.0(2)	3.9(15)	3.0(2)

Note: Numbers of observations are in parenthesis

Source: Cook Islands KAP Survey

4. Conclusions

The KAP survey conducted in the Cook Islands has identified a number of areas of concern, which need to be addressed by the relevant authorities. The questionnaire itself was not very well designed since some strategic questions which should have been asked in this kind of exercise were omitted. For example, to gauge the extent of the unmet need for family planning it is necessary to ask female respondents whether they desire to bear a child within the next two years. Those who claim that they do not wish to have a child, yet they are not currently using an effective contraceptive although they are sexually active, are deemed to have an unmet need. The KAP survey instrument asked neither whether the respondent was sexually active nor whether the birth of a child was desired in the near future. This was a major oversight which severely limits the usefulness of the survey results since the unmet need for spacing children invariably exceeds that for limiting further births, the latter being measurable from the survey.

The results demonstrate wide disparities between the large number of women and men who have heard of a family planning method and the much smaller number who know how to use the method or how each works. That only 1 in 5 women aged 15-19 knows how a condom works is especially disturbing in the age of the HIV/AIDS pandemic. Evidently, much more awareness and IEC activities are needed. Health workers, the principal source of information, need to better illustrate the workings of the various contraceptive methods. The outer islands are more disadvantaged in this respect than Rarotonga.

While the survey revealed a relatively high level of contraceptive use among women (54%), there is a heavy concentration on only two methods – the pill and Depo Provera - indicating that a wider choice of methods is warranted to meet the goals of the ICPD POA. Former users of contraception who are no longer using a modern method often gave up use because of perceived or actual negative side-effects.

Access to services seems to be satisfactory while many methods are perceived not to be available in the outer islands, particularly in Mauke. The authorities need to investigate whether these respondents are misinformed or whether, indeed, the availability of certain methods is restricted.

Our analysis indicates that 27% of all adult women of childbearing age, and 20% of women with a husband or partner, have an unmet need for limiting further childbirth. This appears substantial when set against results from other parts of the world. Again, however, caution is warranted since some of these mainly older women may not be sexually active, a factor which we could not account for in our analysis.

The survey suggests that decision-making on family size matters seems to be jointly-made while desired family size remains relatively high.

There appears to be a large discrepancy between the answers of men and women on their current use of contraception, which is not easily explained.

Initial sexual contacts appear to occur at an early age in the Cook Islands and seem to be occurring at a younger age. No wonder, then, that 37% of 15-19 year old women have already borne a child, particularly when their knowledge of how various contraceptive methods work is very limited. This should alert the authorities on the need for greater awareness-raising and IEC activities.

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