Family planning and contraception in Tongoleleka village, Kingdom of Tonga

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Abstract

A survey of knowledge and practice of family planning and contraception was conducted in a Tongan village in 1991-1992. Nineteen men and 49 women aged 15 to 49 years were interviewed. There was limited knowledge and usage of contraception especially among men. Most respondents said that contraception is the wife's responsibility. There was little discussion about sex and contraception between spouses. Many ailments including backache, migraine and lethargy were blamed on contraception. The withdrawal method and abstention were seen as inferior contraceptive methods. Generally the condom was unpopular. The study concluded that contraceptive knowledge was deficient and that the current family planning service targeting women reinforces the non-participation of men and the idea that contraception is the domain of the woman.

Introduction

The Kingdom of Tonga has a total land area of 699km2. The limited land mass entails serious political, economic and social implications for the Kingdom if changes in population size and dynamics are not kept in check. Apparent social implications of an unchecked population change include an increasing population of landless male Tongans, land shortage, overcrowding, and limited wage employment opportunities. The political ramifications of these problems may include pressure on the government to rectify its traditional land tenure system and economic programs and maximize human resources.

Several suggestions have been put forward by researchers on how to address the perceived consequences of rapid population growth. One of these is out-migration,[1,2,3] which the Tonga Government is exploring. Others have suggested that new techniques of cultivation be developed and that land should only be allocated to people who maximize its output[4].

Most researchers have called for the introduction of a vigorous anti-natalist population policy[1,3,5,6,7]. The policy is being advocated by the Tonga Government through the implementation of the family planning program[8]. In fact, Tonga was among the first developing countries of the Third World such as India, Sri Lanka, Pakistan and China to introduce family planning programs.

Family planning in Tonga

Prior studies on family planning in Tonga are few in number but there are many valuable sources of information on that subject. These include research for post-graduate purposes[9,10,11] and short assignments[12,13,14,15]. Work exclusively centered on family planning include knowledge, attitudes and practise (KAP) surveys[16,17] and a trial of a family planning method conducted by Roman Catholic nuns in conjunction with medical doctors[15].

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Important aspects about the success of family planing in Tonga have been highlighted by these studies. In general three major constraints to the successful implementation of family planning are Tongan attitudes to family planning methods and services, religious beliefs and people's attitude of indifference to overcrowding and overpopulation. One study posited that the success of family planning could be attributed to a weakening of Tongan culture, the desire for better living standards, and the pressure brought about by the limited economy of Tonga[11]. These conclusions are also supported by another study which argued that the success or failure of family planning in Tonga depends on the people's recognition of improved living standards through the reduction in the number of offsprings born[9]. Hence, improved economic status may be influential.

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This study was carried out between 21 November 1991 and 13 February 1992 in the village of Tongoleleka. It describes the subjects' experiences and encounters with the Tonga Government's family planning services and contraceptive methods. It also surveys the subjects' reproductive knowledge and behaviour, their attitudes and practices. The findings are based on small social survey and is supplemented with anecdotal materials to offer some insight to contraceptive practices in Tongoleleka. The findings highlighted by this study should serve to assist the Tonga Government in its family planning program.

Tongoleleka village

The village of Tongoleleka is situated on the island of Lifuka in the Ha'apai Group which lies about 160 kilometers north of Tongatapu. Lifuka island is a sickle-shaped island, so narrow at one point that it can be crossed in ten minutes.[18] The land area of Lifuka is 11.8 square kilometers and constitutes 1.7% of the total land area of Tonga. In 1996, Lifuka had a total population of 3,220 people but the number of people declined to 2,850 people in 1986[19]. Apart from Tongoleleka, four other villages are found on Lifuka. These are Koulo, Holopeka, Pangai and Ha'ato'u.

Tongoleleka, with a population of 820 people at the time of the survey, is made up of six sections each with different numbers of *api kolo* (town allotments). People from the outer islands of Ha'apai also live alongside Tongoleleka villagers in transit settlements created by the government for educational, medical or other social reasons. There are six different churches in Tongoleleka. These are Seventh Day Adventist Church, Church of England, Free Wesleyan Church of Tonga, Free Church of Tonga, Church of Tonga, and The Church of Jesus Christ of Latter-day Saints.

Method

The target of this survey were males and females aged 15 to 49 years. A total of 19 men and 49 women participated in the study. The study is a small not only because it looks at one village but also because the total number of respondents constituted about 19% of the population of Tongoleleka men and women aged between 15 to 49 years.

Information was gathered through the use of a survey questionnaire designed by Agyei[20]. The questionnaire was modified and translated into Tongan and completed privately at home or wherever they felt comfortable. However, in many cases this was not done. The *'api kolo* (household) was the unit of analysis. For every *'api kolo* that had people, at least one male or female questionnaire was given to any potential respondent. Questionnaires were given in order beginning with the head of the *'api kolo* who was usually the father or the husband. The spouse was interviewed, if the head of the *'api kolo* was absent. If, either, the head of the *'api kolo* and the spouse were absent or ineligible, other people within the study's target group were interviewed. A total of 72 were delivered to respondents but only 68 were completed. Of the 68 questionnaires, 49 (72%) were females and 19 (28%) were males.

Results and discussion

Male respondents are less aware of contraception methods compared to females. An average of about 16% of males have heard of one or two methods of contraception whereas an average of 62% of females have heard of methods of contraception.

Most female respondents are aware of are the pill, depo-provera (injection), loop, condom and withdrawal. Eighty-eight percent (43 women) have never known of a village medicine that prevents pregnancy. On the contrary, some female respondents told the author they used various traditional medicine to enhance fertility or treat infertility. Many women (70%) have never heard of nor considered breast-feeding as a contraceptive method. Similarly, several women were unaware that ovulation, rhythm (20%) and abstention (27%) were contraceptive methods. In fact, these forms of contraception were considered to be inferior or improper. However, most women considered the contraceptive methods delivered at Maternal Child Health and Family Planning clinics and hospitals, the true or "proper" methods of contraception. Older women knew more about contraception compared to teenagers.

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Traditional methods of contraception

Male respondents have a limited knowledge of other methods of contraception. On the other hand, six female respondents know other methods of contraception. One of these women wrote a cheeky note, "no intercourse, oral sex". The rest of the women mentioned douching, urination after intercourse and a combination of both douching and urination after intercourse. Presented below are the range of these methods revealed by these women:

a) "After sexual intercourse, I sit up or go to the toilet so that the semen will come out"
b) "Urinate then wash vagina after sexual intercourse".
c) "After sexual intercourse, urinate to 'flush' out the semen"

Table 1. Type of contraceptives used by respondents

Methods of contraception	Tongoleleka respondents' knowledge of contraception method					
	Number of respondents who have used a method of contraception		Number of respondents who have not used a method of contraception		Number of respondents who did not respond for each method of contraception	
	Males	Females	Males	Females	Males	Females
Village medicine	2	1	3	43	5	1
Breastfeeding	4	6	2	37	5	2
Pill	3	7	2	35	5	3
Injection	3	24	1	20	6	1
Loop	1	4	3	39	6	2
Condom	2	2	3	41	5	2
Ovulation/ Rhythm	2	10	2	33	6	2
Withdrawal	3	18	2	25	5	2
Abstention	1	6	3	37	6	2
Number of cases	**19**	**49**				

Note. 9 males and 4 females were excluded from analysis

d) "Urinate then, douch the vagina with water to clean out the semen".

Method (a) is used on the assumption that sitting upright allows semen to retreat out of the vagina while methods (b) employs a combination of urinating after sexual intercourse and washing the vagina. Method (c) only employs urination after intercourse whereas method (d) is a combination of both douching and urination after intercourse. Four women said they have used these methods. Two women became pregnant while using variations of the douching and urination after intercourse method. One woman became pregnant when she used method (a) and, the other when she tried method (b).

The average age of the women who used these methods is 35 with an average of four children. Two women are relatively well-educated and two others are employees of the Niu'ui Hospital. All these women have received secondary education. These women learnt these methods through informal sources like friends and male partners or by self-imagination.

Douching as a contraceptive method is technically and practically ineffective because once the sperm is ejaculated it begins to move up the cervical canal and out of harm's way. The Tongan *'api* are constructed as such that the *fale kaukau* (bathhouse) and the *fale malolo* (toilet) are separate from the main sleeping house (*fale moheofi*) and apart from each other. Therefore there methods are impractical and bothersome to using frequently. The same could be said of the urination after intercourse method. The knowledge, attitude and practice survey conducted in Tonga in 1970 mentioned none of these methods.

Sources of contraception information

The hospital and Maternal Child Health and Family Planning clinics are the main sources of information on contraceptives for women. This is largely due to their contact with public health nurses during pregnancy, postpartum clinic sessions and antenatal visits. Information on family planning or contraception are rarely disseminated through the mass media or through informal sources like friends or relatives. There are several explanations for these least used mediums[16]. Radio broadcasts of contraceptive information would violate cultural concepts, hence, such programs are censored prior to being broadcasted. Newspapers are rarely sold in Tongoleleka. The churches produce newspapers but these only print religious items. Some churches advocate natural methods of contraception and discourage artificial techniques.

Contraceptive usage

Even though most Tongoleleka women regard ovulation and withdrawal as lesser forms of contraception, the fact is, they practise these methods to avoid pregnancy. Withdrawal and ovulation methods are the second and third most frequently used methods in Tongoleleka (see Table 1). Depo-provera is the main contraceptive used. Twenty-seven

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Table 2. Turnover in contraceptive usage among Tongoleleka respondents

	Turnover in contraceptive usage among male and female respondents						
	Males respondents			Female respondents			
Methods of contraception	Used this method	No longer use this method	Omitted	Used this method	No longer use this method	Turnover (%)	Omitted
Village medicine	2	1	5	1	-	--	2
Breastfeeding	3	1	5	6	4	66	3
Pill	3	3	5	7	6	85	4
Injection	3	2	6	24	18	75	2
Loop	1	1	9	4	3	75	3
Condom	2	2	5	2	1	50	3
Ovulation/Rhythm	3	1	6	10	3	30	1
Withdrawal	3	1	5	18	5	27	2
Abstention	1	1	6	6	2	33	3
Number of cases	**19**			**49**			

Contraception usage by male respondents is negligible. Condom and abstention are the least preferred methods by men as opposed to village medicine and condom usage for female respondents. Women consider withdrawal either sexually impractical or impossible to practise. Nevertheless, withdrawal method is predominantly practised in Tongoleleka.

Contraception failure

Nine women conceived while using a method of contraception. One man was practising withdrawal and the other when his wife was on the pill and when he used condoms. The latter man's wife became pregnant twice. As for the other 7 women that got pregnant, 2 women said their husbands used withdrawal method while another 2 women practised the ovulation method. Another 2 women conceived when they practised variations of the douching and urination after intercourse. Two women said their husbands practised the withdrawal method and two other women practised the ovulation method. Of these latter women, one had been fitted with a loop while the other was on the pill. Another female respondent stated that she became pregnant when her partner used condoms.

Thirty-eight women had not become pregnant. Similarly, fourteen (14) men claimed their wives did not become pregnant when they practised contraception.

Contraception after childbirth

Most women in Tongoleleka use depo-provera after giving birth. Depo-provera usage was found to be particularly high among female respondents who give birth for the first, second and third time. The trend was particularly high among women who had given birth to their first child. Usage of other contraceptive methods is also high during first and second childbirths. Six women have used one or more methods of contraception at one point of their childbearing life but they do indicate after which births they had used such methods. The majority of women (about 70%) do not practise any particular method of contraception and an average of 12% of males have never used any specific method of contraception. The figure could be higher. Some respondents (about 29%) were omitted from this analysis because they did not complete the contraception form. Four respondents (two men and two women) used a method of contraception and were practising these methods but did not indicate after which childbirth.

Coitus after childbirth

Female respondents argue that coitus should not resume for one month to 12 months whereas male respondents wish to resume coitus as early as 2 weeks. The median duration after the birth of the child and when coitus can resume for male respondents is 6 months. Most female respondents (16 women) believe coitus should not occur for 3 months. Christening of newborn children usually takes places when the child is 3 months old. Many women prefer to refrain from sexual engagements until the child is christened. It is claimed that, if a woman resumes sexual intercourse before the child is christened, the complexion of the skin becomes dry and parchy. It is said that elderly women can tell that a woman has "slept" with her husband before a child is christened.

Responsibility for contraception

Most respondents (10 men and 27 women) believe the wife should seek the information about contraception. Sixteen women, however, think both husband and wife should take responsibility for information regarding contraception. Only 3 women believe the husband should seek information

on contraceptives. They stressed that it was time, men learnt what women experienced.

Communication about contraception

It is easy for respondents to indicate who should be responsible for getting contraception information, if they wished to learn about it. But, do they actually discuss contraception when the information is obtained?, or do they even discuss contraception at all before seeking professional assistance? Thirty-five women and 14 men said they can discuss contraception with their spouses.

If 49 respondents say, they can discuss contraception with their spouses, have they discussed contraception with their spouses at all? Out of these total, only 4 people (2 men and 2 women) have not discussed contraception with their spouses. One woman did not offer an explanation but the other woman said her husband was "very conservative, ignorant and would have nothing to do with family planning".

Nine respondents (1 man and 8 women) said they cannot discuss contraception with their spouses. The male respondent had not done so because he had only been married for 16 months and did not have any children. He was not even certain if he would ever get to discussing family planning or contraception at all with his wife. Of the 8 women, one did not provide an explanation and 2 have been living separately from their husbands. Two women, age 27 and 35, married with 4 children each said their husbands are ignorant of contraception. While the younger woman said her husband is ignorant and therefore unaware of contraception, the older woman's husband does not consider family planning important. These two women seem to suggest their willingness to talk about contraception but cannot interest their husbands.

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Another woman and her husband are so conservative "they don't like talking about contraception". Of the last two women in this analysis, one 41 year old mother of six, in a resigned manner said, "just let the wife do it herself". The final respondent seems to think that contraceptive methods are only those provided by hospitals. She wrote "[we] have not talked about it because we do not use contraceptives from the hospital".

Turnover of contraception usage

Many Tongoleleka respondents refrained from continuous contraceptive use. The contraception methods with high turnover among male respondents and their wives are the pill, loop, condom and abstention. Among the female respondents, the contraceptive methods with high turnover are the pill, depo-provera and loop. The methods with least turnover for women are abstention and ovulation whereas breast-feeding and withdrawal feature for men (see Table 2). Most Tongoleleka respondents prefer natural methods of contraception.

There are many reasons why Tongoleleka respondents no longer use a particular contraceptive method. A male respondent whose wife used village medicine as a form of contraception stopped because the wife became sick every time she used it. However, many female respondents told the researcher that, "Tongan medicine is used to induce pregnancy and not to prevent pregnancy". Three men said their wives no longer took the pill. According to one man, the pill "does not really prevent [his] wife from getting pregnant while another man said, his wife stopped taking pills because she "felt it was bad for her". The third man's wife stopped because she got "fed-up with taking it" and because she experienced back-aches.

Seven women were at one time on the pill but they no longer use it. However, 9 women gave reasons why they no longer take the pill. Four of these women stopped after experiencing side-effects ranging from changes in skin texture, constant state of lethargy to joint aches and constant back-ache. Two women stopped taking the pill because the necessity of continually taking the tablet at the correct time each day every day proved too much. One of these women went through one cycle of pills and gave-up after she forgot to take one at the correct time. One stopped because she wanted to have another child. Unfortunately for another woman her husband accidentally discovered that she was secretly taking the pill and knowingly breaching the teachings of their church. He prevented her from taking pills.

Two men said their wives used depo-provera. One man's wife got tired of it whereas the other man's wife said she felt that the chemical was "too strong for [her] body". Twenty-four women said they used depo-provera, but 75% (18 women) stopped taking it. Two women stopped taking depo-provera because they wanted to have another child. In fact, both women were pregnant at the time of this research. The rest of the women decided not to use depo-provera again. Three women did not say why they no longer use this method but eleven women stopped because they had experienced biological disorders. Three of these eleven women all complained of irregular periods (*"fehalaaki e puke fakamahina"*) and one also grew obese (*"ongo'i fu'u sino"*)

while another complained of experiencing back-aches and severe migraine on the days prior to her menstrual cycle. One woman said the government nurse did not inform her about the possible side-effects, except the benefits. Another woman had complained to the nurse after experiencing side-effects but was told by the nurse that her problems were unrelated to depo-provera. She eventually left "God to space out my children because contraceptives are bad for me".The other woman, apart from not having her period complained that her stomach "bulged".

Six women listed several complaints which included growing obese, back-ache, migraine, change of skin complexion from fair to dark complexion, feeling weak and constantly feeling lethargic. Two single mothers stopped because they are no longer having sexual relationships whereas one woman said she was "just too lazy" to continue depo-provera administration. The most tragic case with depo-provera in this study is the story of the respondent who said she did not know she was pregnant when she visited the hospital and received a depo-provera injection. The baby was delivered stillborn. She did not state whether the baby was stillborn because of the injection. She also had a cyst in her ovaries.

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The respondents' experience with loop is not as varied as with depo-provera. Five respondents, including a male respondent's wife had used the loop but had it removed when she reached menopause. Unfortunately, one other woman had the loop removed because she thought she had reached menopause but got pregnant at age 47. Two others had the loop removed, one because she had "difficulty in sitting upright" and the other because she was pregnant.

The condom is not well received by respondents. Of the two men who no longer use condoms, one said, "its not

"I'm too lazy to put it on and
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cording to one male respondent
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nes times I withdraw too late".
ot honest as shown by this female
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gnant twice when my husband
side".

Both male and female respondents claimed that abstention is "impossible" unless said one man, "my wife and I are parted from each other", as in the case of a woman whose husband is absent overseas. Two women do not use this method because they think it is "impossible" and "a lie".

Influences on the number of children

About half the male respondents (42%) and the majority of female respondents (80%) said no one influences them over number of children they have. Nevertheless, several male and female respondents said other people, particularly, doctors and nurses, and parents and close relatives influence their decisions. Others let it to the Almighty, "God controls everything".

Sterilisation

Sterilisation is probably an ideal method for couples who have completed their families. In Tongoleleka, it seems that sterilisation is not attractive even if it was recommended to couples who have completed their families and who do not desire to practise contraception. Male respondents (47%) would consider sterilisation after having all the children they want compared to 29% of women (14 women). The men would consider sterilisation if their wives experienced difficulty during delivery or for the welfare and health of their wives and children.

Four women in the study have already undergone sterilisation operations. Two women voluntarily decided to undergo sterilisation while the other two women underwent the operation on the recommendation and advice of doctors. One of these two women had a difficult labour that lasted nearly a week. The other woman had to undergo an operation to remove a cyst from her ovary which was feared to be cancerous. During the operation, two cysts were discovered so she asked to be sterilised.

Thirty-two women (65%) do not desire to be sterilised at all because they fear surgical operation. Some believe they control their reproductive life and therefore, they can decide on the number of children they desire. Several women made it very clear that they will continue to have children until they reach menopause. Other women disagreed with sterilisation because such operation would introduce problems to their body and mar their beauty. In general, many Tongoleleka respondents do not contemplate sterilisation as a method of family planning except in medical and health circumstances but only at the recommendations of a health professional.

Family size

All married women in this survey have had a child. A total of 58 respondents had 196 living children. Forty-five female

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respondents had a total of 153 children (67 sons and 86 daughters) and 13 male respondents have 43 children, (25 sons and 18 daughters).

The average number of living children per female respondent in Tongoleleka is 3.4 and the median is 3 living children. The average number of living children for both female and male respondents is 3.4 and the median again is 3 living children. The 1970 national average number of living children per woman was 4.5 and the median was 4.6 living children[16]. In contrast with the knowledge, attitude and practise survey of the Kingdom in 1970, it can be said that the size of the family in the village has declined.

Fertility

Thirty-seven female respondents who had experienced more than one childbirth were selected to determine the actual birth spacing. Most women have children two years apart. Forty-six children were born after a two year interval. About 22.2% (or 24 children) were born after a year interval, 15.7% (17 children) were born at an interval of 3 years and 12% (13 children) were born at four year intervals. The median number of years for spacing children among these 37 female respondents is two years.

" It was observed that in Tongoleleka relatively well-educated women use inferior methods such as urination after intercourse. "

The median age at first childbirth among 43 Tongoleleka women is 26 years of age. The average age at first childbirth is 24 years of age. For the second and third childbirth, the median ages at birth are 25 and 28 years respectively. A sample of 595 Tongan women had a median age at first pregnancy of 21.8 years[16]. Their comparison of 131 women over 40 years old with 48 younger women (15-25) revealed that the median age at first pregnancy for older women was 21.9 and 19.9 years for younger women. Analysis of Tongoleleka female respondents show an increase of about 3 years for younger (15-25) and older women (40 years plus). Both, on the other hand, have an average age at first childbirth of 24.4 years and a median of 23 years.

Conclusion

The availability of family planning services assisted Tongoleleka people with their reproductive decisions. However, the full potential of the service is not realised by the government and the acceptors. One area that needs attention is the role of education at secondary institutions. It was observed that in Tongoleleka relatively well-educated women use inferior methods such as urination after intercourse.

Teenage girls (15-22 years), young unmarried women, and men are the least knowledgable group in Tongoleleka. Instructions in family planning, sex education, human reproduction and physiology in formal educational institutions infringes upon a complex and culturally sensitive topic. Hodgkinson (1980) while advocating education noted that this is not as simple as it seem in a country with a cultural *tapu* against discussion of sexual issues on radios, in newspapers or in educational institutions[20]. Information regarding sex is a principal part of birth control and family planning and will therefore need to be confronted cautiously and in a subtle way if family planning and sex education is taught.

In Tongoleleka, the most popular methods of contraception are depo-provera, withdrawal and rhythm/ovulation method. The wide-usage of depo-provera throughout Tonga since 1972, is due to its simplicity and effectiveness. There is, however, the need to assess the social, medical and psychological effects of various methods of contraception to address acceptors complaints. Many women in Tongoleleka have become non-family planning users or resorted to ineffective and primitive methods because of their bad experiences with contraceptives. Hence, government nurses need to be sensitive and informative when treating women's contraceptive needs and to address their complaints and misconceptions.

The withdrawal and abstention methods are seen as lesser forms of contraception because they are not dispensed at government clinics. Methods like sterilisation, pill, loop and condoms are regarded as "real" methods of contraception. These methods are also the least used. The pill is less favourable because of the trouble of continuous daily administration at the right time. Fear is the main reason for women not using mechanical methods like the loop and sterilisation. Generally, most Tongoleleka couples do not like condoms. This attitude is not unique to Tongoleleka[21].

Family planning programs have for too long focused on women so that people in Tongoleleka think it is the rightful domain of women. The government clinics unintentional single sex service attitude has only served to reinforce the mentality of family planning being an exclusively women's only service. The Maternal Child Health and Family Planning service needs a new image to make family planning appeal to men.

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" The skilful doctor treats those who are well but the inferior doctor treats those who are ill "

Ch 'in Yueh-jen (c. 225 BC)