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## Perspectives of Physicians in Sri Lanka on Periodic Abstinence

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### Summary

Since physicians strongly influence both national family planning policy and individuals' contraceptive choice, a survey was conducted to learn about the perspectives of Sri Lankan physicians (n = 100) regarding periodic abstinence methods of family planning (PA). Female doctors (28% of the sample) were twice as likely to have ever provided PA advice to their clients as their male counterparts. Providers of PA were more likely to have ever personally used this form of contraception than PA non-providers. Regardless of PA provider status, all physicians most frequently recommended pills, injectables and IUDs to their clients. They had very good knowledge of the temperature method. The scientific foundation of this method is studied in medical school, suggesting that if the other modern methods (Billings and sympto-thermal) were incorporated into medical school curricula, physicians might be more willing to discuss, refer or provide

other modern, scientific forms of PA to their clients.

### Introduction

Sri Lanka exhibits one of the highest known rates of periodic abstinence (PA) use in the developing world, with 15 percent of all married couples choosing these methods of contraception<sup>1</sup>. It is believed that many of these couples employ an indigenous form of the calendar rhythm method. Data from the world fertility survey (1975) and the contraceptive prevalence survey (1982) show that the use of contraceptives in Sri Lanka increased by 23% during the period between these two studies<sup>2</sup>. The data from these surveys suggest that this increase is largely due to the increased use of traditional methods among the younger, better educated segment of the population. However, it has been argued that this apparent rise is mainly due to methodological difficulties in detecting the prevalence of PA and that the latter survey merely underestimated the rate to a lesser degree than the earlier survey did.<sup>3</sup>

Periodic abstinence has only recently received close scientific scrutiny, and controversy still exists in the family planning community whether these methods of contraception are desirable. Proponents advocate PA as an effective, natural method of birth spacing

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and limiting, that harmonizes with one's body and environment. Critics argue that PA lacks practical feasibility, and point out its low use-effectiveness<sup>4</sup>. Most of the research conducted in the past decade has concentrated on the effectiveness of periodic abstinence<sup>5</sup>. Unfortunately methodological differences have contributed to a pool of somewhat diverse conclusions. Clearly, there is a need for further investigation of the advantages and disadvantages of periodic abstinence methods.

Several recent studies suggest that the couple's level of motivation and their perception of PA are the two main factors which will influence method use-effectiveness<sup>7</sup>. Motivation and perception can be largely influenced by the method of PA training employed. A major benefit of PA is that it does not require supervision and training from medical personnel. Instead, these tasks can be carried out effectively by lay persons and experienced users. It has been argued that: "the main hope for PA lies in women helping each other"<sup>8</sup>.

Although physicians are rarely actively involved in the training of PA, they play an important role in shaping public opinion toward family planning methods. Their opinions are highly valued in most societies and are often considered the final authority on medical matters. Physicians' beliefs and perceptions about contraceptive methods can influence couples' choice of contraception<sup>9</sup>. Physicians also play an important role at a policy level in deciding what methods of birth control will be emphasized in national family planning programs. This study set out to determine phy-

sicians' level of knowledge, their attitudes and behavioural intentions regarding periodic abstinence.

#### Methodology

**Definition of Terms:** This paper represents the findings from one setting in a multi-country study<sup>10</sup>. The other countries were Mauritius, Peru and the Philippines. In this study, periodic abstinence refers to the following four methods of contraception which are based on fertility awareness or periodic abstinence: 1. the calendar rhythm method, 2. the Billings method (ovulation method), 3. the temperature method (basal body temperature) and 4. the sympto-thermal method (temperature, cervical mucus and secondary fertility observations).

Many proponents of PA do not include the calendar method in the same category with the other three methods since it does not involve observations of physiological signs of fertility. However, the calendar method was included in the study because many physicians in Sri Lanka equated it with periodic abstinence. They were far less familiar with the remaining methods, and questions concerning the calendar method served as a useful introduction to the different sections of the interview.

A "PA provider" was defined as a physician who has provided periodic abstinence advice to a patient on at least one occasion. The physicians interviewed in this study were classified into three categories (category 1: general practitioners responsible for family health, category 2: medical officers of health, district medical officers and medical officers in family planning centres and mercantile firms, category 3: gynaecologists).

**Sample:** The purposive sample of 100 physicians was selected from lists provided by the state health service and the Family Planning Association of Sri Lanka. Due to prevailing unsettled conditions in the Northern and Eastern provinces, these two regions were excluded from the study.

The study data were collected by means of a 14 page questionnaire written in English. The face-to-face interviews typically lasted from fifty minutes to an hour. The principal investigator was a physician himself and easily established rapport with the respondents. Interviews were conducted at the respondent's home or workplace, depending on the physician's preference. The data were analysed in the computer facilities of the University of Exeter.

The sample consisted of 39 general practitioners, 46 medical officers and 15 gynaecologists. Forty worked in

private practice, 43 in government health institutions, 2 in a university setting, 4 in non-government health institutions, and 11 in other settings.

The physicians were evenly divided among providers (49%) and non-providers (51%) of PA. The goal of the study was to examine differences between these two groups in five main areas:

1. Socio-demographic characteristics
2. Family planning services provided
3. Knowledge about periodic abstinence methods
4. Perceived usefulness of periodic abstinence methods
5. Intention to provide periodic abstinence method advice in the future.

The results are intended to be of special interest to program managers and others concerned with raising the medical community's awareness of periodic abstinence.

Table 1

Socio-demographic characteristics by PA provider\* status

Characteristics	PA providers	Non-providers
	(n=49)	(n=51)
	%	%
Age		
>40 (n=35)	49	51
40+ (n=65)	49	51
Sex		
female (n=28)	64	36
male (n=72)	33	67
Medical speciality		
general practitioner (n=39)	46	54
medical officer (n=46)	54	46
gynecologist (n=15)	40	60

\* A PA provider is a physician who has ever provided a PA method.

**Results****1. Socio-demographic characteristics**

Of the socio-demographic characteristics studied, only the gender variable displayed a noticeable difference (Table 1). Female physicians were almost twice as likely to be PA providers than their male counterparts (64% vs 33%).

**2. Family planning services provided**

Both PA-providers (36%) and non-providers (39%) mentioned the pill as the form of contraception they most frequently recommended (Table 2). No PA method ranked among the five most frequently mentioned forms of contraception.

**Table 2****Family planning characteristics by PA provider status**

<i>Method</i>	<i>PA providers (n=49) %</i>	<i>Non-providers (n=51) %</i>
<b>Five methods most frequently recommended by physicians</b>		
Pill	36	39
Depo-Provera	22	28
Female sterilization	16	10
IUD	14	18
Condom	2	4
<b>Percent of physicians who provided each PA method*</b>		
Calendar	98	—
Temperature	10	—
Billings	10	—
Combination of PA methods	96	—
<b>Family planning methods ever personally used**</b>		
Condom	53	55
Pill	39	49
Calendar	51	26
IUD	20	12
Withdrawal	25	6
Female sterilization	14	16
Temperature	6	4
Billings	4	4
Sympto-thermal	0	0

\* Percents do not sum to 100% since some physicians provided more than one method.

\*\* Percents do not sum to 100% since some physicians had used more than one method.

Of those offering PA methods (49%), nearly all provided the calendar method (98%), while only a few offered the temperature or Billings method (10% for both). None of the physicians reported having provided the symptothermal method to their patients. Only 4% stated that they exclusively provided PA methods.

Physicians most frequently mentioned the condom when asked what forms of contraception they had ever personally used (providers 53% vs non-providers 55%). Providers were almost twice as likely to have used the calendar method than non-providers (51% vs 26%). The other PA methods had seldom been used by either group.

### 3. Knowledge about periodic abstinence methods

The physicians were asked about the most frequently mentioned forms of PA (the calendar rhythm, the temperature and the Billings method); whether they had no knowledge of the method, knew it by name only, knew the basic principles or possessed detailed knowledge. All the providers and non-providers claimed to have at least some knowledge about the calendar method (Table 3). Providers of PA were more apt than non-providers to report that they had detailed knowledge about the calendar method (61% vs 45%), while the non-providers were more likely to say that they understood only the basic principles (53% vs 37%). The providers' claimed level of knowledge was also substantially higher for the temperature and the Billings method.

To test for actual knowledge, a list of the most important features of the three methods was compiled. The

physicians were asked to describe the methods as they would to a prospective user. A simple cumulation of points for each important feature of the PA method known was taken as reflection of the physicians' actual level of knowledge.

The PA providers displayed a higher degree of knowledge about the three methods than the non-providers. Regarding the calendar method, 96% of providers had moderate or high levels of knowledge compared with 77% of non-providers. Roughly equal proportions demonstrated high knowledge of the temperature method (90% of providers vs 84% of non-providers). One third of the physicians had never heard of the Billings method and were not tested for their actual knowledge. Of those physicians who had heard of the Billings method, more providers than non-providers demonstrated a high degree of actual knowledge (81% vs 59%).

### 4. Perceived usefulness of periodic abstinence methods

Providers of PA methods were more likely to evaluate the usefulness of these methods positively. Six per cent of the providers described PA methods as very useful, while none of the non-providers gave this response. Sixty-seven per cent of the providers described the methods as useful (vs 45% of the non-providers). Over half (55%) of the non-providers believed PA methods not to be useful at all.

### 5. Intention to provide periodic abstinence methods in the future

When asked if they would recommend PA methods to their clients in the future, 45% of providers and 31% of non-providers gave an affirmative

**Table 3**  
**Percent<sup>1</sup> distribution of physicians with claimed and demonstrated knowledge of three PA methods by PA provider status**

<i>Level of knowledge</i>	<i>PA providers (n=49) %</i>	<i>non-providers (n=51) %</i>
<b>Claimed knowledge</b>		
<b>Calendar</b>		
none	—	—
name only	2	2
basic principles	37	53
detailed knowledge	61	45
<b>Temperature</b>		
none	—	2
name only	6	8
basic principles	51	55
detailed knowledge	43	35
<b>Billings</b>		
none	10	16
name only	29	37
basic principles	44	37
detailed knowledge	17	10
<b>Demonstrated knowledge<sup>2</sup></b>		
<b>Calendar<sup>3</sup></b>		
none	—	—
low	4	24
moderate	69	53
high	27	24
<b>Temperature<sup>4</sup></b>		
none	—	—
low	2	2
moderate	8	14
high	90	84
<b>Billings<sup>5</sup></b>		
none	3	—
low	5	22
moderate	11	19
high	81	59

<sup>1</sup> due to rounding, columns do not always add to 100%.

<sup>2</sup> only tested physicians who had heard of the method.

<sup>3</sup> one provider missing.

<sup>4</sup> one non-provider missing.

<sup>5</sup> 12 providers, 19 non-providers missing.

Table 4

Percent<sup>1</sup> distribution of physicians' willingness to discuss PA method with their patients by PA provider status and by PA method

Willingness	Calendar <sup>2</sup>		Temperature <sup>3</sup>		Billings <sup>4</sup>		Sympto-thermal <sup>5</sup>	
	PA providers (n = 49) %	Non-providers (n = 51) %	PA providers (n = 49) %	Non-providers (n = 51) %	PA providers (n = 49) %	Non-providers (n = 51) %	PA providers (n = 49) %	Non-providers (n = 51) %
To initiate discussion	35	28	29	30	17	6	19	15
To respond to inquiries	63	66	63	56	67	60	67	54
Not willing to discuss	2	6	8	14	15	34	14	30

<sup>1</sup> due to rounding, columns do not always add to 100%

<sup>2</sup> one non-provider missing

<sup>3</sup> one non-provider missing

<sup>4</sup> four non-providers, three PA providers missing

<sup>5</sup> five non-providers, seven providers missing

response. Providers were slightly more likely to initiate discussions about the different forms of PA than were non-providers (Table 4). They were most likely to start conversations about the calendar method (35% of providers vs 28% of non-providers). Only 6% of non-providers said they would initiate conversations about the Billings method. The majority of physicians in both groups said they would be willing to answer questions about PA, but would not initiate any conversations. Again the calendar method received the most favourable response, with 63% of providers and 66% of non-providers reporting that they would answer questions concerning this method. Fifteen percent of providers and 34% of non-providers claimed they would refuse to discuss the Billings method, even if the client initiated the conversation.

#### Discussion

The result of this study represents the perspectives of a purposive sample of physicians likely to be in the position of providing family planning advice. The extent to which the findings are applicable to the total population of physicians in Sri Lanka is unknown.

Both providers and non-providers displayed good knowledge about the calendar method. This high level of knowledge could be explained by the fact that two-thirds of the physicians were over age 40. These physicians entered reproductive age during a time when the calendar method was one of only a few family planning methods available.

Both groups demonstrated a remarkably high level of knowledge about the temperature method and showed willingness to discuss this method with

their clients. The scientific principles of the method taught in medical school is a likely explanation for its acceptance in the medical community. Some of these physicians may also have experience teaching subfertile couples to use the temperature method in order to achieve a pregnancy. In addition, the use of a scientific instrument (i. e. thermometer) to measure the basal body temperature might also enhance the method's credibility.

Fifty-nine percent of all physicians interviewed stated that PA methods were useful. If couples in Sri Lanka continue to show interest in PA methods, then the potential support base from the physicians already exists. However, the physicians' knowledge about the sympto-thermal and the Billings methods appear incomplete, and many doctors felt uncomfortable discussing these methods with their patients. Like the temperature method, these two forms of family planning are based on rigorous scientific investigation<sup>11 12 13 14</sup>. A concerted effort to educate the medical community about the scientific principles of all forms of PA will be necessary if PA methods are to successfully join the other modern methods in Sri Lanka's national family planning program.

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