

# Knowledge and Fears among Chilean Women with Regard to the Papanicolaou Test

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*The work reported here, which was performed in Santiago, Chile, in 1993, explored factors relating to low Pap test coverage. A survey instrument was prepared and interviews were obtained with 299 women 25–54 years of age who were attending three primary health care clinics in Santiago. Most (at least 87%) of these women had not had a Pap test in three years. Only 28% knew the test's purpose was to detect cervical neoplasia; most (58%) knew the test was related to reproductive health but did not have a clear idea of its purpose; 14% knew nothing of the test or gave completely incorrect answers. Health personnel and the mass media were cited as principal sources of information about the test. Regarding anxieties relating to the test, 60% of the women said they were afraid of being reproached by a health practitioner for failing to come in sooner; 39% said they feared pain resulting from the test; 20% said they feared bleeding; and 14% were afraid they might lose part of the uterus. Also, of the 231 women with intrauterine devices, over 25% said they feared removal of the device. These results suggest a need to improve communication between health care workers and their patients, and to ensure that health personnel respect the rights of women, especially their right to sufficient information enabling them to make their own decisions.*

Cervical cancer continues to be a serious public health problem in Latin America and the Caribbean. In the Region of the Americas as a whole, between 20 000 and 30 000 women die each year from this disease (1, 2). Mortality has remained roughly constant in most countries, including Chile, where it was almost 12 deaths per 100 000 women in 1990. Cervical cancer is the leading cause of death among Chilean women 20–44 years old (3).

The Papanicolaou cervical cytology (Pap) test, available in all countries of the Americas, is a simple, efficient, effective, low-cost means of detecting cervical cancer in the early stages. Most countries also have secondary prevention programs. Some, such as Canada, have set a worthy example by achieving significant reductions in cervical cancer mortality (4). In

Chile, the current Ministry of Health program recommends that women between the ages of 25 and 65 have a Pap test every three years, in accordance with WHO guidelines. This recommendation is based on studies showing that Pap test screening at least every five years could reduce current cervical cancer mortality by 60% to 90%, and that performing screening tests every year does not increase their effectiveness (4). (In previous times, women in Chile were advised to have a Pap test every year—5.)

Reducing the recommended frequency of screening was expected to result in increased coverage. However, despite annual promotion campaigns that were deemed to have yielded good results, the true extent of Pap test coverage is unknown. Some Ministry of Health officials have estimated it at 30%, while a recent survey found it to be 58%. Coverage is difficult to estimate, since the population that should be covered is not well-defined (6).

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Health services in Chile today have an improved capacity to perform the Pap test, but not all women who should have the test are doing so. Indeed, it seems clear that 80% of all Pap screening continues to be performed on women in the 15–35 age group, which is the group at lowest risk. This is because the Pap test is generally performed in the context of the maternal-perinatal program that provides relatively young women with prenatal care, well child care, and family planning services.

The problem of low coverage is exacerbated by record-keeping deficiencies that promote unnecessary repetitive testing of the same women. Both of these factors may help to explain why it has not been possible to reduce cervical cancer mortality in Chile. Most women in the high-risk age groups are not being tested as often as recommended, and potential cancer cases are consequently not being detected until the disease has reached the advanced stages and the patient has begun to experience symptoms. Within this context, it would be extremely helpful to learn more about why women fail to take the test.

A study conducted in Argentina (7–9) among women with positive Pap tests found that they had relatively little knowledge of the test's nature. Although 80% of them had received at least two Pap tests, 27% did not know the test's purpose. Their principal sources of information had been doctors (33%), other women (33%), and the mass media (20%). Most of those who had good-quality information reported that they had obtained it from a physician's office (35.3%) or through the media (29.4%), which indicates the important role that these sources play in this type of health education.

In this same vein, a Santiago study found that 72.8% of a group of female patients interviewed in physicians' offices knew that the Pap test was designed to detect cervical cancer. However, 37% of these same women did not know that the risk of this

type of cancer increases after 35 years of age, and 35.8% had not had a test in the preceding three years. Of the women interviewed, 23.2% of those under 24 years of age were up to date with their Pap tests, even though the test is only recommended after 25 years of age. When the 25–35 and 35–54 age groups were compared, it was found that a slightly higher percentage of those in the 35–54 group were overdue for a test, affirming that the higher rates of Pap screening were occurring in the population at lower risk (10). When the women who were overdue for a Pap test were asked why they had failed to have one, 39.7% said that they lacked information, 31.7% said that they had forgotten or neglected to have the test, and 16.1% said that they felt apprehensive or fearful.

The study described in this article sought to explore the factors that deter Chilean women seen in primary health care clinics from having Pap tests at the recommended intervals. The hypothesis underlying the study was that the predominant factors were fear of the test and lack of adequate information about its nature and purpose.

## MATERIALS AND METHODS

The study, which was exploratory and descriptive in nature, was based on interviews conducted in Santiago, Chile, during the months of June, August, and November 1993. The interviews coincided with the launching of a project called "Support for Preventive Health Care and Early Detection of Cervical and Breast Cancer among Women in Southern Santiago."<sup>2</sup> The study population consisted of women served by three primary health care clinics in the southern and western portions of Santiago (La Feria, San José, and Maipú). The women

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were between 25 and 54 years of age and, at the time of the study, most were at least one year overdue for a Pap test.

A sample of 861 women was selected at random from among those whose names were on file in the maternal-perinatal section of each clinic and who had been seen between January 1987 and January 1989. However, 248 refused to be interviewed for lack of time or interest; and 314 were not found because of record-keeping errors or death. Hence, the final sample consisted of 299 women. Records on women at the San José and Maipú clinics whose Pap test results revealed a pathologic process were not available, because those records had been sent to a central clinic to which these patients were referred. Therefore, information on women with positive Pap test results was available only at the La Feria Clinic.

To obtain their data, the investigators prepared an interview questionnaire containing 70 questions. This was tested on 24 women attending the local San Joaquín Clinic and was then modified in light of the results obtained, comments of clinic health care practitioners, and suggestions by community leaders. The instrument, which was administered by a trained interviewer, included questions relating to the socio-demographic characteristics of the women interviewed, their ideas about the Pap test's purpose, their information sources, and their fears about the test. In order to determine the specific nature of these latter fears among women who had not had Pap tests at the recommended intervals, the instrument included questions relating to perceived risks. The answers were analyzed by age group (<36 years, 36–45 years, and >45 years) and level of education (no formal education or some primary school; complete primary school or some secondary school; and complete secondary school or more advanced education).

The answers to the question "What is the purpose of the Pap test?" were ranked according to the following categories in terms

of quality: (1) good (the respondent knew that the test's purpose was to detect cervical cancer); (2) fair (the respondent knew the test was related to reproductive health but did not have a clear idea of its purpose); and (3) poor (the respondent's answer was totally incorrect). The percentage of women who had no knowledge whatsoever about the test was also determined.

Only women in the last two clinics surveyed (Maipú and San José) were asked about the source of the information because this question was added only after the results of the first application of the questionnaire had been reviewed. Consequently, a total of 199 women answered this question.

## RESULTS

At the La Feria Clinic, 30 women yielded positive Pap test results. Of the 299 women interviewed at all three clinics, 34% said they had failed to have a Pap test because they had forgotten; 17% said they did not have time; 27% did not consider it necessary to have the test every three years or said health workers had not asked them to have it; and 8% expressed fear of the procedure (Table 1).

When the women were grouped by educational level, it was found that those with the most schooling were more likely to be up to date with their Pap tests (16%), but they were also more likely (33%) to consider repetition of the test unnecessary or say they had not been asked to have it. In each of the three educational categories a similar percentage of women (from 7% to 10%) expressed fear about having the test.

When the women were grouped by age, it was found that 30% of those over the age of 45 were up to date with their Pap tests, and that 10% of those under the age of 36 expressed fears about the test. Among the women 36–45 years old, 38% said they had failed to have the test because they had forgotten.

As Table 2 indicates, when questioned about the purpose of the Pap test, 28% of

**Table 1.** The percentages of the 299 survey women who had or had not obtained a Pap test within the preceding three years and the proportions citing different reasons for not taking the test, by level of formal education. Santiago, Chile, 1993.

	Educational level			Total (n = 299)
	None or incomplete primary education (n = 95)	Complete primary or incomplete secondary education (n = 143)	Complete secondary or more education (n = 61)	
Women overdue for a Pap test and reasons cited:				
<i>Forgot</i>	39.0%	38.5%	18.0%	34.4%
<i>Lack of time</i>	14.7%	16.1%	23.0%	17.0%
<i>Considered it unnecessary or not asked by health personnel to take it</i>	28.4%	24.4%	32.8%	27.4%
<i>Fear of procedure</i>	9.5%	7.0%	9.8%	8.4%
Women up to date with their Pap tests	8.4%	11.9%	16.4%	11.7%
Women who didn't know date of last Pap test	—	2.1%	—	1.0%
Total	100.0%	100.0%	100.0%	100.0%

the 299 women gave good answers, 58% gave fair answers, 10% gave incorrect answers, and 4% knew nothing of the test.

Table 3 shows the quality of the information according to the source cited by the respondent. Health care personnel were cited by a noteworthy share (30%) of those with good-quality information. The mass media were cited by an even larger share

(36%) of those with good-quality information, but were also cited by the largest share (12%) of those with incorrect information.

When quality of information was related to education (Table 4), it was found that a relatively high share (43%) of the most educated group had good-quality information, as compared to 25% of the intermediate group and 23% of the group with the least education.

As can be seen from Table 5, only 19% of the women over 45 years old had good-quality information, as compared to 30% of those 36–45 and 27% of those under 36. In summary, women under 45 years old, those who said their source of information was the mass media, and those who had completed secondary school were more likely than the other groups they were compared with to have good-quality information about the Pap test.

Table 6 shows the most frequent fears indicated by the 299 survey women (not

**Table 2.** Percentages of the 299 survey women whose responses indicated they had good, fair, poor, or nonexistent knowledge of the Pap test's purpose.

Quality of knowledge indicated by response	Percentage (n = 299)
Good	27.8
Fair	57.9
Poor	10.0
Complete lack of knowledge	4.3
Total	100.0

**Table 3.** Percentages of 186 survey women from the Maipú and San José clinics with good, fair, and poor knowledge of the Pap test who said they got this knowledge from health personnel, the mass media, friends and neighbors, or other sources.

Quality of response	Source of information				Total (n = 186)*
	Health personnel (n = 73)	Mass media (n = 73)	Friend or neighbor (n = 27)	Other (n = 13)	
Good	30.1%	35.6%	29.6%	46.2%	32.6%
Fair	61.7%	52.1%	63.0%	38.5%	56.8%
Poor	8.2%	12.3%	7.4%	15.4%	10.5%
Total	100.0%	100.0%	100.0%	100.0%	100.0%

\*Excludes 100 women from the La Feria Clinic and 13 who had no knowledge whatsoever about the Pap test.

**Table 4.** The percentages of the 299 survey women who had good, fair, poor, or nonexistent knowledge of the Pap test, by educational level.

Quality of response	Educational level			Total (n = 299)
	None or incomplete primary education (n = 95)	Complete primary or incomplete secondary education (n = 143)	Complete secondary or more education (n = 61)	
Good	23.1%	24.5%	42.6%	27.8%
Fair	60.0%	60.8%	47.5%	57.9%
Poor	11.6%	9.1%	9.8%	10.0%
Complete lack of knowledge	5.3%	5.6%	0.0%	4.3%
Total	100.0%	100.0%	100.0%	100.0%

**Table 5.** The percentages of the 299 survey women who had good, fair, poor, or nonexistent knowledge of the Pap test, by age group.

Quality of response	Age (in years)			Total (n = 299)
	<36 (n = 108)	36–45 (n = 164)	>45 (n = 27)	
Good	26.8%	29.9%	18.5%	27.8%
Fair	54.6%	59.1%	63.0%	57.9%
Poor	12.0%	7.9%	14.8%	10.0%
Complete lack of knowledge	6.5%	3.1%	3.7%	4.3%
Total	100.0%	100.0%	100.0%	100.0%

**Table 6.** Fears related to taking the Pap test that were indicated by the 299 women surveyed, by age group and education.

Nature of the fear	Percentage					
	Age (in years)			Educational level		
	<36 (n = 108)	36–45 (n = 164)	>45 (n = 27)	To incomplete primary (n = 95)	To incomplete secondary (n = 143)	Complete secondary or more (n = 61)
Being reproached by the practitioner for not having come previously	61.1	62.2	44.4	64.2	60.1	54.1
Removal of intrauterine device*	34.5	23.0	23.8	21.4	31.9	25.0
Pain resulting from the test	39.8	36.6	44.4	40.0	39.2	34.4
Bleeding resulting from the test	13.9	25.0	7.4	25.3	18.2	13.1
Extraction of a piece of the uterus	8.3	18.9	7.4	21.1	11.9	8.2

\*Based only on the responses of those 231 women who had an intrauterine device.

just those who said they avoided taking the test out of fear) about the Pap test. The most common fears were being reproached by health care workers for having failed to have the test at the recommended interval (60%) and fear of pain (39%). Also, over 25% of the women expressed fear of losing their intrauterine devices (IUDs) during the Pap test, while lower percentages said they feared bleeding as a result of the test (19%) or losing a piece of the uterus (14%).

It is noteworthy that 60% of the women answered affirmatively when asked "Are you afraid the health care practitioner will reproach you for not coming previously?" Although this fear appeared to diminish somewhat as the survey women's age and educational level rose, it was still expressed by a considerable 44% in the oldest age group.

In addition, over a quarter of the women with IUDs said they were afraid the IUDs would be removed without their consent. This fear was more common among the

women under 36 (35%), being expressed by lower and roughly equal percentages (23% and 24%) of those 36 to 45 and over 45, respectively. Among the women who had no schooling or who had not completed primary school, 21% expressed misgivings in this regard, whereas 32% of the women who had completed primary but not secondary school expressed this fear.

Overall, 39% of the women said they were afraid of being in pain after the exam, a figure that rose to 44% among those over 45 years old. The percentage of women with complete secondary education expressing this fear was slightly lower (34%) than the percentages with less education who expressed such fear.

Only 19% of the women interviewed voiced fear of bleeding as a result of the test. This fear was expressed by 25% of the women in the 36–45 age group, as compared to only 7% of those over 45. When the women were grouped by educational level, the percentage expressing this fear

was found to diminish (from 25% to 13%) as educational level rose.

The percentage of women who said they feared losing a piece of their uterus was small overall (14%), being highest in the 36–45 age group (18.9%). Once again, the percentages of women expressing this fear showed a close inverse correlation with educational level, the figure declining from 21% in the least educated group to 8% in the most educated.

## DISCUSSION

If the results of this study are compared with those of the Argentine study (7–9), in which health workers were associated with a slightly higher percentage of good responses than the mass media, it might be concluded that in Chile the media are better or that health personnel are worse at conveying information about the Pap test. Although both possibilities might be valid, it should be noted that the Chilean study was conducted in the midst of a metropolitan campaign supported by the Ministry of Health to promote the Pap test, and that the subject of Pap tests had been dealt with on many occasions and numerous television programs aimed at the female population. This steady broadcasting of information on cervical cancer may have helped to enhance the quality of the answers given by the women whose information came from the mass media.

It is alarming that the Chilean survey women in the over-45 age group were least likely to have good-quality information about the Pap test, since women tend to stop visiting their gynecologists once they reach menopause and cease having access to the Pap screening tests associated with family planning programs. Therefore, maternal and child health professionals have difficulty contacting women in this age group in order to get them to come in for a Pap test. Nevertheless, the members of this group have generally had the longest sus-

tained relationship with a gynecologist's office, and they could therefore be expected to be the best-informed group. Given that the sample was composed largely of women who had had recent contact with the maternal health care team and who had had a Pap test in the previous four years, the relative lack of knowledge is revealing. Although ongoing contact with the health care system may have given these women a fair amount of knowledge about the purpose of the Pap test, it is apparent that the knowledge they acquired was not always accurate. If the information that women have about the test's purpose is taken as an indicator of the effectiveness of health personnel in transmitting knowledge, it is reasonable to conclude that these personnel are not communicating well and that women with the least schooling tend not to assimilate the provided information to the same extent as other groups.

In future studies, it would be desirable to undertake a more systematic assessment of the messages transmitted by the mass media and how they are received by various segments of the population, with a view to improving the effectiveness of those messages.

The fear of being reproached by health care personnel, expressed by a majority of those surveyed, clearly reflects a perception that health personnel have an authoritarian and less than respectful attitude that should be changed.

Many women at the clinics where the interviews were conducted expressed fear of having something done to their reproductive organs without their consent. These women said that they had experienced problems of this type in the early 1980s, and this was confirmed by the directors of the College of Midwives. However, as we were never able to obtain records that would have made it possible to verify how many IUDs were removed without the consent of the patients, we were interested in finding

out whether women still had this fear—and our results confirmed that they did. Generally speaking, the fears expressed by the women in this study may indicate that the treatment they have received from health personnel, particularly during gynecologic exams, causes them to feel fearful, rather than encouraging them to have screening tests.

The fear of pain expressed by some two-fifths of the respondents was the result of an erroneous understanding, because the Pap test itself—i.e., taking a sample of cervical mucus—does not hurt. Nevertheless, the patient may find having her organs touched during the gynecologic examination unpleasant and even painful if she is tense, whether for personal reasons or because of the nature of her relationship with the health care worker. It should also be borne in mind that the women interviewed had undergone many gynecologic examinations (only 0.7% of the sample had not had children) and at least one Pap test.

The fear that a piece of the uterus would be removed was also due to lack of knowledge of the test's nature, which consists of taking a smear of cervical mucus, not a sample of the cervix. If the patient does not possess a basic understanding of the procedure, it is easy for her to believe that taking a sample will mean extracting a "piece" of the uterus. One would expect that this fear, along with the slightly more common fear of experiencing bleeding as a result of the test, tends to discourage women from having Pap tests. Overall, therefore, our findings suggest a need to improve communication between health care personnel and patients and to ensure that health personnel respect the rights of women, especially their right to information sufficient for them to make their own decisions.

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