

PN ACE-208
10-1-82

In-House Peru

**Introduction of Multimedia as an
Information Tool for Sexual and
Reproductive Health Education in
INPPARES, Lima, Peru**

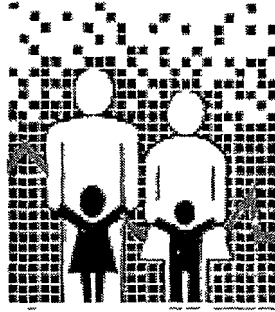
FINAL REPORT

The Population Council seeks to improve the wellbeing and reproductive health of current and future generations around the world and help achieve a humane, equitable, and sustainable balance between people and resources. The Council ■ analyzes population issues and trends ■ conducts biomedical research to develop new contraceptives ■ works with public and private agencies to improve the quality and outreach of family planning and reproductive health services ■ helps governments to influence demographic behavior ■ communicates the results of research in the population field to appropriate audiences ■ and helps build research capacities in developing countries. The Council, a nonprofit, nongovernmental research organization established in 1952, has a multinational Board of Trustees, its New York headquarters supports a global network of regional and country offices.

This project was funded by the U S Agency for International Development Office of Population, under Contract No CCP-3030 C-00-5007-00, Latin America and the Caribbean Operations Research and Technical Assistance in Family Planning and Reproductive Health (INOPAL III) Population Council internal accounting code 0352 04041

A

PN-ACE 208



**INTRODUCTION OF MULTIMEDIA AS AN INFORMATION TOOL FOR
SEXUAL AND REPRODUCTIVE HEALTH EDUCATION
IN INPPARES, LIMA, PERU**

Anibal Velasquez
INPPARES

Max Tello
Johns Hopkins University, PCS

Maria Rosa Garate
Population Council/Peru

**INOPAL III
IN-HOUSE PROJECT
March 28, 1997 to September 30, 1998 (Internal Accounting Code 0352 04041)**

October 29, 1998

B

FINAL REPORT

**INTRODUCTION OF MULTIMEDIA AS AN INFORMATIONAL
TOOL FOR SEXUAL AND REPRODUCTIVE HEALTH EDUCATION
IN *INPPARES*, LIMA, PERU**

CONTENTS

I Introduction	2
II Methodology	2
III Results	3
IV Discussion	5

11

INTRODUCTION OF MULTIMEDIA AS AN INFORMATIONAL TOOL FOR SEXUAL AND REPRODUCTIVE HEALTH EDUCATION IN INPPARES, LIMA, PERU

I Introduction

An interactive computerized multimedia system to provide reproductive health information to clients was tested in the main clinic of INPPARES¹, the IPPF affiliate in Peru, as a collaborative effort between INOPAL III Project of Population Council and Johns Hopkins University/Population Communication Services from Mar 1997 to Sept 1998. The main objective of this study was to test the feasibility of using a multimedia tool to provide basic information on contraception, sexuality, and other reproductive health issues to visitors at a family planning clinic. Other objectives were to determine if, in the users' views, the interactive multimedia tool offered comparative advantages to other means of information delivery, and to determine what population acceded to the tool and their opinions of the information provided.

II Methodology

This was a demonstration project that required the design, development, and introduction of the instrument, and evaluation of the entire process. Selection of topics was initially based on topics used in successful reproductive health IEC efforts in Peru.

Table 1 *Topics and type of material presented in the interactive program ISABEL*

REPRODUCTIVE HEALTH	SEX EDUCATION	CONTRACEPTION
Why is it good to plan my family? (v)	Machismo (v)	IUD (t)
What is reproductive health? (t)	First sexual relation (v)	Condom (v)
Male sex organs (a)	Conversing with my family (v)	Rhythm method (v)
Females sex organs (a)		Tubal ligation (a)
Knowing my menstrual cycle (a)		Vasectomy (a)
Why is it important to breastfeed? (t)		Implants (a)
Pregnancy care (a)		Injectables (a)
Sexual hygiene (a)		Oral contraceptives (v)
What is Papanicolaou? (t)		Lactational amenorrhea (v)
What is conception? (a)		Vaginal tablets (a)
Abortion (v)		
Benefits of reproductive health (v)		

v = video, a = animated short story, t = text

The program was named "Isabel, your information counselor", and was designed to operate in Windows '95 on a compact disc of 600 MB. The program includes 10 videos, 11 animated short stories, and four items of text only. "Isabel" solicits information on age, gender, educational level, and district of residence from users before access is allowed to the interactive system, printing the information in an Excel database for later analysis.

Due to the sophisticated nature of the program, all the necessary equipment was not available in Peru, so was purchased offshore. The following specifications were used: PC IBM-compatible with Pentium II MNX 233 mhz, RAM memory 80 MB, super VGA 16 million colors with 2 MB RAM, Sound Blaster or compatible, hard disk 3 GB, compact disc drive 24x velocity, and touch-sensitive screen 17" diagonal.

¹ Instituto Peruano de Paternidad Responsable

A local company, VORTEX, was hired to program "Isabel " and train INPPARES personnel in its use. Equipment was first tested for five weeks in the INPPARES clinic in Lima with final adjustments made. Pre-testing resulted in the decision to assign a "host(ess)" to offer orientation to clients in use of the equipment. Presence of a hostess also solved the potential problem of children attempting to access the system. A second test period of four months (January-April 1998) resulted in final adjustments to the equipment, the program, and the habituation to its use by INPPARES personnel. The final version was put into action from May to Sept 1998 from Monday through Friday, 10 a m to 5 p m , and Saturdays, 10 a m to 1 p m

In order to evaluate the multimedia tool, a brief survey was applied to all clients consulting the system on 13 days between July and August. A total of 232 persons were surveyed on their opinions of the tool and level of satisfaction with it, including acceptance and usefulness of the service and of the information provided, preference for "Isabel " or the traditional face-to-face counseling, and suggestions to improve the system. Surveyed users were not different from all system users on the characteristics of age and education.

III Results

During 539 hours of public exposure, 670 clients accessed the multimedia tool for a total of 1,712 consultations. Women comprised the majority (67%) of system users. The average number of consultations was not different by sex. System users were generally young adults ages 20-30, with only 7% over age 40 (13% male and 4% female). High educational attainment was characteristic of users. 84% had more than a high school education.

Of the three general themes available for consultation, "Reproductive Health" was the most frequently visited (41%), perhaps due to having the greatest number of topics to choose from. Three of the five most frequently visited topics were within the theme of "Sex Education", all of which were videos, a characteristic that is perhaps the greatest attraction of the system.

Table II Ten topics most frequently consulted

TOPIC CONSULTED	Frequency	%
Benefits of family planning	142	25
First sexual relation	112	20
Machismo	110	19
Hygiene	103	18
Abortion prevention	103	18
TOTAL	570	100

Acceptance The opinion survey showed that 96% of users liked it. Reasons given were:

- It motivates and stimulates interest in the user due to its attractive appearance
- It is a novel way of offering information on these topics
- The information is important to know
- It is easy to understand, and facilitates learning
- Many other reasons, especially that it is free and saves time

The 4% who did not like the system opined that it did not satisfy their expectations for information, and that it lacked privacy (referring to the location of the multimedia tool).

Usefulness Seventy-three percent of users thought “Isabel ” was useful. Specifically that it

- Permits access to new information
- Dispels doubts
- Offers clear and simple information
- Has good and necessary information and messages
- Avoids the embarrassment of discussing with providers
- Economical, since it is a free alternative to paid consultations
- Accessible, since its use is not restricted
- Teaches and helps

About 24% of users thought the system was only partially useful, since it needed “more topics and more in-depth information on the topics already included”. Others mentioned, for example, that one couldn’t “re-ask the machine” (greater interactivity) or that a person should be available to advise on use of the system (a factor external to the system). A minimal 3% of users considered the system as having little or no usefulness.

Preferred information source For 57% of surveyed system users, “Isabel ” was easier to consult than a traditional provider or counselor. Most reasons referred to the rapidity and timeliness of getting information from the program, the simplicity and ease, and the possibility of “not feeling shamed” (“the machine does not reproach”). Another 38% of users preferred traditional counseling, since “information is more complete”, and questions or doubts can be answered. For some, counseling provides greater privacy, since many people can observe what is being shown on the multimedia tool, and others like the personalized treatment and consider the machine “cold”. Finally, 5% had no preference for either one or the other method of obtaining information.

Suggestions for changes or improvements Forty percent (136) of those surveyed made recommendations for changes to the multimedia tool. Several recommendations can be grouped to suggest the need to change the location of the machine in order to reduce ambient noise and provide more privacy so others cannot see the topic being consulted.

Table III Suggestions for improving the multimedia service

SUGGESTIONS (n=136)	%
Improve the audio	40
Provide more detailed information	38
Provide more privacy	32
Increase number of topics	32
Change location of machine	15
Other suggestions	20

Note: Column percentages add to more than 100 since respondents could give more than one response.

Two of the suggestions referred to content of the service: desire for more detailed information and more different topics. In regard to detailed information, most frequently the term “conception” was criticized as too ambiguous and general. New topics suggested were led in frequency by sexually transmitted diseases. Other comments suggested including the capability of interrogating “Isabel ” and giving better instructions on its use.

Most of these suggestions resulted from the process of adapting the system to regular clinic use. For example, clinic receptionists were continually interrupted by the sound of voices in the multimedia machine, especially when many clients lined up to use the system. This resulted in the

staff lowering the machine volume and thus losing the good audio. Instructions regarding use were not clear to users, especially when a "help" screen appeared that, instead of being recognized as a "tutor" to practice using the screen, was considered a sign of being inoperative which discouraged further use.

Use of "Isabel" en la *Feria del Hogar* (Household Fair)

Another opportunity to test the multimedia system was provided by the Ministry of Health and its Program for Reproductive Health and Family Planning which in July and August of every year reserves a booth at the city-wide *Feria del Hogar*. "Isabel" was exposed to the public for 14 days, approximately 10 hours a day, accumulating a total of 2,454 visits or 18 consultations per hour, meaning that there was full utilization of time available. The population of "Isabel" users at the fair, as compared to that of the INPPARES clinic, was significantly younger (many under age 13 and adolescents under age 19, together comprising more than one third of users) and lower educational achievement (39% had no more than secondary education).

Topics consulted at the *Feria del Hogar* were similar to those consulted in INPPARES, with the exceptions that contraceptive information was highly solicited at the fair. Women were most likely to seek information on the contraceptives Norplant and injectables. Men consulted mainly on vasectomy and tubal ligation. Both women and men coincided with their principal choices of topics as "benefits of reproductive health" and "machismo". Least solicited topics were "abortion prevention", "male organs", and "lactational amenorrhea".

IV Discussion

The use of multimedia as a tool to provide information was demonstrated to have a high level of acceptance in the populations to which it was exposed. Age groups of both genders between 10 and 30 years of age were especially likely to use the tool. A notable decrease in interest was noted among the population over age 40. It is possible that this age group is self-eliminating for fear of manipulating equipment to which they perhaps have had little or no previous access.

Users manifested that "Isabel" is an excellent way to obtain information in private, avoiding possible recriminatory remarks from the counselor. However, there is also consensus among that it is not a replacement for traditional counseling, which should be available in connection with the machine in order to provide more in-depth information when necessary. The trial showed that the multimedia tool can offer information in non-private situations. On the other hand, more intimate topics could be offered, for example on STDs or sexual relations, if a more private location could be utilized.

Greater efficiency in use of the tool was found when the tool was located in a public place with massive concurrence (the fair), where it is utilized to its maximum capacity. Therefore, its cost-effectiveness would be greater in places such as the main entrances to public hospitals, universities, and public or private high schools. For the latter, it would be possible to economize by using a "mouse" instead of the very costly touch-sensitive screen.

Success of the system is associated with its novelty. Topics need to be changed from time to time to maintain high levels of interest.

There is evidence that users of the system respond truthfully to the solicitation of information, since anonymity is guaranteed. It may be possible, therefore, to utilize the tool to obtain

information on sensitive topics (STDs, HIV-AIDS, sexual practices) that is difficult to obtain by other methods

Results on topics most frequently consulted make it possible to observe the tendency in need for information of the population

The evaluation allowed detection of several problems in the proper functioning of the system and the delivery of information. Under the latter criteria, the last version of "Isabel" was corrected by modifying access to the contraception module, which appeared with restrictions to the full range of information when the user was asked about his/her reproductive intentions. Copies of the latest version will be distributed among Cooperating Agencies and the National Reproductive Health Program.

This first attempt to use a multimedia tool as an educational tool has stimulated much expectation and opportunities to continue testing content material that will cover the educational needs of a segment of the population.