

PD-AAZ-540  
132 61798

Prepared for

The Indonesian National Family Planning  
Coordinating Board (BKKBN) and USAID/Jakarta  
PIO/T 49709327-3-70104

**MIDTERM EVALUATION OF  
FAMILY PLANNING DEVELOPMENT  
AND SERVICES II PROJECT  
VOLUNTARY STERILIZATION  
COMPONENT  
A.I.D. PROJECT NO. 497-0327 (G)**

by

Biran Affandi  
Roy Jacobstein  
Firman Lubis  
Alan Margolis

Fieldwork  
February 23 to March 18, 1989

Edited and Produced by

Population Technical Assistance Project  
Dual and Associates, Inc. and International Science  
and Technology Institute, Inc.  
1601 North Kent Street, Suite 1014  
Arlington, Virginia 22209  
Phone: (703) 243-8666  
Telex: 271837 ISTI UR  
FAX: (703) 538-9271

Report No. 88-017-088  
Published August 3, 1989

## Table of Contents

Table of Contents .....	i
Glossary .....	iii
Acknowledgements .....	v
Executive Summary .....	vii
1. Introduction and Background .....	1
1.1 Family Planning in Indonesia .....	1
1.2 VS Development .....	1
1.3 Project Objectives .....	2
1.4 Project Implementation .....	3
1.5 Evaluation Scope of Work .....	4
1.6 Evaluation Team .....	4
1.7 Evaluation Methodology .....	4
2. Service Facilities Upgradation .....	7
2.1 Background .....	7
2.2 Renovation Activities .....	7
2.3 Provision of Equipment .....	8
3. Training .....	13
3.1 Background .....	13
3.2 The Nature of Training .....	13
3.3 Training Outputs .....	14
3.4 Training Issues .....	15
4. Support of Repair and Maintenance (RAM) Center .....	19
4.1 Purpose of Center .....	19
4.2 Need for Center .....	19
5. Provision of Technical Assistance (TA) .....	21
5.1 Background .....	21
5.2 Quality of Technical Assistance .....	21
6. Establishment of Nationwide Quality Assurance (QA) and Surveillance Systems .....	23
6.1 Background .....	23
6.2 Quality Assurance Activities .....	23
7. Private Sector Activities and Plans .....	27
7.1 Background .....	27
7.2 Achievements to Date .....	27

8.	Establishment of a Reversal Center .....	29
8.1	Background .....	29
8.2	Evaluation of Activities .....	29
9.	Additional Implementation Issues .....	31
9.1	Institutional Capabilities and Roles of Concerned Organizations .....	31
9.2	Demand for VS Services .....	35
9.3	Information, Education and Communication (IEC) .....	38
9.4	BKKBN-provided VS Financial Assistance (Subsidization) .....	38
9.5	Operations Research .....	39
10.	Recommendations .....	41

### List of Appendices

Appendix A	Scope of Work
Appendix B	List of Training Centers
Appendix C	Evaluation Team Itinerary
Appendix D	List of Persons Interviewed
Appendix E	List of Documents Studied
Appendix F	Questionnaire: Evaluation of VS Program
Appendix G	Equipment Purchases
Appendix H	Project Implementation Letters (Training)
Appendix I	Training Activities
Appendix J	Deaths Related to VS Procedures
Appendix K	Number of Sterilizations
Appendix L	Results of Survey/PKMI Annual Meeting
Appendix M	Voluntary Sterilization Component Commitments under FPDS II

## Glossary

A.I.D.	U.S. Agency for International Development
AVSC	Association for Voluntary Surgical Contraception
BAPPEDA	Provincial Development Planning Board
BKKBN	National Family Planning Coordination Board (Indonesia)
FPIA	Family Planning International Assistance
GOI	Government of Indonesia
IDI	Indonesian Association of Doctors
IEC	Information, Education and Communication
IMA	Indonesian Medical Association
IPPA	Indonesian Planned Parenthood Association
IUD	Intra-uterine Device
JHPIEGO	Johns Hopkins Program for International Education in Gynecology and Obstetrics
OB/GYN	Obstetrics/Gynecology
Pelita	Five-Year Development
PIL	Project Implementation Letter
PKMI	Indonesian Association for Secure Contraception
Puskesmas	Sub-district Health Center
Repelita	Five-Year Development Plan
RAM	Repair and Maintenance
RP	Rupiah (Rp. 1,750 = US \$1.00)
UNFPA	United Nations Population Fund
URC	University Research Corporation
USAID	U.S. Agency for International Development (Indonesia) Mission

Vasectomy  
without scalpel  
(*Vasectomi  
tanpa scalpel*)

A recently devised procedure for (Vasectomi tanpa pisau) vas ligation: local anesthesia using special instruments to localize and isolate both vas at a single entry point in the scrotum thus without knife cutting or removal of any flesh.

VS

Voluntary Sterilization

## Acknowledgements

We would like to acknowledge the help of Dr. Emmanuel Voulgaropoulos and Mr. John Rogosch. They encouraged us and provided excellent support in the Population and Health Office of USAID/Jakarta. Dr. Haryono Suyono and his colleagues at the National Family Planning Coordinating Board (BKKBN) and Dr. Azrul Azwar and his staff at the Indonesian Association for Secure Contraception (PKMI) were extremely helpful. They provided valuable insights into the efforts to bring family planning to all the people of their country.

We appreciate the insights afforded us by Mr. David Denman whose long experience in population matters and perspective on Indonesia were valuable. Mr. Russ Vogel gave unstintingly of his expertise. His boundless energy was matched only by the extent of his knowledge of the voluntary sterilization program in Indonesia.

Finally, the excellent secretarial support of Ms. Jean Pello saw the various drafts into final form with promptness and completeness.

Each of us on the team have appreciated the complementary skills which other team members brought to the evaluation. It has been a multilevel learning experience.

## Executive Summary

### Introduction

This midterm evaluation of the Voluntary Sterilization (VS) Component of the Family Planning Development and Services II (FPDS) project is intended to assist Indonesia's National Family Planning Coordinating Board (BKKBN) and USAID in the preparation of new project activities.

Although BKKBN has almost 20 years of experience in coordinating, implementing and monitoring family planning service activities, the VS Component is a relatively new addition--it was not until 1984 that BKKBN requested support directly from USAID to carry out VS service development activities. The VS Component (1984-1992) was funded at US \$7.9 million and was designed to enlarge the VS effort in Indonesia begun in 1974 by a non-governmental organization, the Indonesian Association for Secure Contraception (PKMI), in collaboration with the Association for Voluntary Surgical Contraception (AVSC), the Pathfinder Fund, and the Johns Hopkins Program for International Education in Gynecology and Obstetrics (JHPIEGO).

Because VS is not formally included in Indonesia's national family planning program, PKMI has supplied BKKBN with the technical assistance necessary to implement the project. PKMI also receives technical and financial support from AVSC (primarily from AVSC's central funds, supplied by A.I.D./Washington). PKMI's central office in Jakarta has acted as a coordinating organization. PKMI has 2,500 members nationwide and branch offices in 26 of 27 provinces. It has overseen Phase I of the VS Component, which included substantial decentralized efforts in upgrading VS surgical sites in 13 provinces, and training of medical teams and counselors. Phase II of the VS Component (also overseen by PKMI), which includes an expansion of activities undertaken in Phase I, has just been initiated after a needs assessment was carried out in hospital surgical units in all 27 provinces.

### Project Accomplishments

Major accomplishments in Phase I include the following:

- Since 1984, 201 district hospitals and 269 health centers in the 13 provinces containing 70 percent of the country's population have been renovated and equipped with medical and non-medical equipment to support the provision of VS services. This facility upgrading has been completed in a timely and satisfactory manner, and as a result, more and better facilities are in now place and capable of serving more clients.
- Phase II (already underway) of the VS Component calls for the expansion of services to the 14 outer provinces (71 sites) as well as increasing service sites in the original 13 provinces (142 sites). A total of 213 hospitals will receive renovation and appropriate medical and non-medical equipment.
- An impressive amount of VS-related training took place in Phase I and more is scheduled in Phase II. Over 400 medical teams and 1000 counselors have been trained, 143 community leaders have been oriented to VS, and other individuals who are referrers of potential clients (midwives, GPs) are about to be trained.

- A reversal center, located at Clinic Raden Saleh in the heart of Jakarta, has been established by the Department of Obstetrics and Gynecology, University of Indonesia, Jakarta.

## Project Issues

Considerable opportunities exist for progress in the future and continued improvements in client services. Continuing attention is being paid to quality assurance, monitoring, evaluation of trainees, consideration of refresher activities, maintenance of technical equipment, assurance of reversibility, extension of IEC and involvement of the private sector. Because of the extent of the program and the different organizations involved, both national and international, great efforts continue to be required to coordinate the many aspects of VS activity.

The following are some of the specific concerns being addressed:

- While PKMI has responsibility for the projects it undertakes, it has no authority (except in cases where it is paying a salary to someone) to assure that its wishes are being carried out.
- There is no mechanism or structure at either PKMI's central or provincial level to cope adequately with quality assurance problems.
- Medical supervision is not carried out by capable, highly regarded, and motivated medical experts, and medical reporting forms are overly complex and difficult to interpret.
- Immediate (within 24 hours) reports to the central level of deaths and major complications requiring hospitalization do not currently occur. Thorough investigations of deaths are not carried out in a timely fashion.
- Service units regularly report delays in receiving reimbursement for services from the BKKBN, causing them to operate with a financial disincentive to providing high quality services in increasing amounts.
- Vasectomy training has not been carried out to the extent originally envisaged because training is dependent on adequate caseloads which at present do not exist sufficiently at all training sites.
- Provincial chapters of PKMI do not have sufficient funding or staffing to follow up regularly with all of their medical trainees.
- Not all doctors are equally and fully committed to family planning in general or to VS in particular, and a number of doctors trained under the project either had many other responsibilities or were transferred soon after their training was completed.
- No funds have been available for the operation of the repair and maintenance (RAM) center since 1986, leading to a lack of repair capacity for the laparoscopes used in tubectomies. At present, approximately 25 percent of instruments are not totally functional.

- There have been strains in the relationship between USAID and AVSC occasioned by inadequate communication between the two organizations.

## Major Recommendations

1. USAID should support an additional doctor (epidemiologist) at BKKBN's central level. Increased assistance also should be made available to PKMI to support qualified clinicians at certain active PKMI branches, and in strengthening medical supervision and monitoring, and trainee follow-up.
2. A central unit for medical quality assurance (QA) and data analysis should be established at BKKBN.
3. BKKBN, with PKMI support, should establish a standard reporting procedure whereby VS-related mortality and serious morbidity requiring hospitalization are reported immediately to central as well as provincial BKKBN and PKMI levels.
4. BKKBN should continue to work to simplify the existing VS subsidy system for provider facilities and see that subsidies are promptly and regularly provided. BKKBN should also work to change policies so that VS is exempted from local tax and service charges.
5. Consideration should be given to instituting a sliding scale so that clients pay according to income level and ability to pay. In all possible instances, clients should pay at least a token amount, if not more; this contributes to family planning self-sufficiency, and strengthens voluntarism. Inability to pay, however, should not prevent a client from obtaining VS; service units should be encouraged to provide services to the poor.
6. A comprehensive training evaluation and needs assessment should be undertaken as soon as possible.
7. In all training, the intended permanency of VS should continue to be emphasized.
8. Clinical training of medical teams in minilaparotomy with local anesthesia should be emphasized and strengthened, and become the standard for training of GPs and surgeons.
9. Clinical training of medical teams in vasectomy should be continued, linked to assessments of local utilization.
10. Training in counseling should be continued and strengthened.
11. Where demand is high, consideration should be given to development of provincial service teams which could assist busy district hospitals.
12. All trainees, especially those receiving medical (team) training, should be carefully selected, taking into account individual motivation and commitment to provide family planning/VS services.

13. Follow-up of all medical (team) trainees should be made within 2 to 4 weeks of training to see that the trainees are performing VS procedures satisfactorily and with adequate equipment and supplies.
14. Further activity in service facility renovation is recommended only for specific instances of need based upon demonstrable demand.
15. The reversal center at Raden Saleh should receive continued support for services to clients.
16. Initial counseling and screening of potential reversal clients should take place at the provincial level.
17. Previously agreed-upon support of a RAM center should be provided by BKKBN. Support of one central RAM center site is sufficient. In regions where the VS program is active, a RAM subcenter for simple repairs could be established at an appropriate surgical center.
18. In regard to laparoscopes, priority should be given to the purchase of new laparoscopic telescopes in exchange for ones with damaged or cloudy lenses on a one-for-one basis.
19. USAID and AVSC should meet as soon as possible to discuss issues of mutual concern and to agree on an annual workplan for AVSC's activities in Indonesia; and AVSC should augment its presence in Indonesia.
20. If buy-in funds are available, an AVSC in-country advisor to PKMI should be considered.
21. Funding of the Resident VS Advisor to BKKBN should be continued.
22. Operations research should be undertaken to study key issues in service delivery, IEC and training.
23. Carefully considered expansion of IEC for VS in potentially receptive areas is recommended, using strategies appropriate to the local social and cultural environment.
24. Efforts to familiarize private practitioners and hospitals with the VS program, and to obtain their support, should be continued.

# 1. Introduction and Background

## 1.1 Family Planning in Indonesia

Family planning has been a national priority for almost twenty years in Indonesia and such significant advances have been made that the country is recognized as a world leader in family planning affairs. In 1988, President Soeharto was recognized by the Population Institute when he was presented with its first "Global Statesman in Population" award (when bestowed in subsequent years it will be called the "Soeharto Award"). In 1989, President Soeharto will also receive the United Nations Population Fund (UNFPA) award for outstanding contributions to the relief of population problems.

The National Family Planning Coordinating Board (BKKBN) was established in 1970. Reporting directly to the President, it acts as liaison to all Ministries, e.g., the Ministries of Health, Home Affairs and Population/Environment. Demographic and contraceptive goals have been proposed and met by successive governmental five-year development plans (*repilita*). The emphasis has been on modern and secure methods of family planning, freely chosen on the basis of individual family needs. Oral contraceptives, IUDs and injectables are readily available and Indonesia has the world's largest experience with Norplant (over 200,000 acceptors).

The 1987 contraceptive prevalence rate was 48 percent. The need for continued expansion of services and continued increases in acceptors, however, is prompted by an increasing number of couples of reproductive age reflecting the high birth rates of the 1960s. While the total fertility rate has dropped from 5.6 in 1970 to 3.6 in 1986, there has also been a 50 percent fall in infant mortality--from 140 in 1970 to 70 in 1989. A continuation of the falling growth rate depends, therefore, on intense family planning activity. At least 700,000 new family planning acceptors must be enrolled annually to meet projected goals.

## 1.2 VS Development

In early 1983, BKKBN informed USAID that it was the appropriate time to start planning a special VS project that USAID and BKKBN had been discussing for several years. Previously, because of the sensitivity surrounding VS in Indonesia, BKKBN had not been able to become involved directly with development of a VS program. Rather, a non-governmental, professional medical organization, the Indonesian Association for Secure Contraception (PKMI), which had been established in 1974 with assistance from the Association for Voluntary Surgical Contraception (AVSC), was charged with implementation of the VS program.

At that time (and currently), VS was not an official method of family planning and was not promoted publicly. Instead, the Ministry of Health allowed hospitals to provide VS services as a health measure for multiparous women and women considered high risk for further pregnancies; provision of services depended on the availability of trained staff (almost none existed at that time) and the attitude of the hospital administration and medical staff. Even with this weak promotion of VS, however, there were signs of demand in Indonesian society based on the significant increase in the number of VS cases each year which had elicited no objections from

either informal or formal leaders or from religious authorities. At the same time, it was still clear that VS was a very sensitive subject that had to be properly promoted and developed if community and leadership difficulties were to be kept to a minimum.<sup>1</sup>

In 1978, AVSC and PKMI developed a national VS medical training plan to which USAID and the Government of Indonesia (GOI) agreed. Five national VS training centers were set up at university medical teaching institutions in strategic locations throughout the country. These five centers, along with two additional centers funded earlier by Pathfinder, provided postgraduate medical training for VS teams of one doctor and two paramedics. Additionally, routine VS services were provided in these training centers as part of the training program, with support from AVSC in the form of per case institutional financial subsidies.

In 1981, AVSC and PKMI agreed to discontinue direct training support and instead work through the training centers to assist those health facilities with trained staff to establish VS services. This decision was taken because many trained staff, although agreeing to start VS services in their health facilities as a precondition to receiving VS training, were not able to do so because of lack of equipment, hospital director support, and inadequate per case financial subsidies.

Subsequently, AVSC and PKMI, working with five training centers, chose five to ten hospitals per training center, carried out a needs assessment in 1983 at each hospital to determine equipment and renovation needs, and then provided the necessary equipment and renovation funds to the hospital for its VS service delivery program. Also, a per case institutional financial subsidy (usually about 50 percent of the actual total cost to the acceptor) was provided to the hospital for each VS case carried out. The purpose of this new approach was to test whether providing VS services on a more extended scale would cause objections from informal and formal leaders. This did not seem to be the case.

By 1984, PKMI had VS service delivery projects in 8 provinces, covering approximately 75 hospitals. Also, at this time several special pilot projects were conceptualized, planned and implemented: vasectomy education and service delivery in health centers, counseling training for hospital nurses, and VS medical supervision, all meant to improve the scope and quality of VS service delivery.

### 1.3 Project Objectives

The VS Component of the FPDS II project was designed based on the system devised by PKMI and AVSC in 1981 to initiate VS services in hospital and health centers, utilizing a needs assessment to determine health facility needs, and providing renovation funds, medical equipment, and non-medical furniture.

The original objectives for this component, as outlined in the FPDS II project paper, were as follows:

1. To upgrade 173 provincial hospitals and 346 health centers to provide voluntary sterilization services in 13 priority provinces;

---

<sup>1</sup>An example of problems for VSC that were continuously in evidence was the religious leaders' meeting on family planning held in 1985, at which, while approving the IUD as a contraceptive method, a statement was issued clearly declaring VS to be unacceptable because of its permanent effect on bodily structures. This declaration retarded VS development for more than a year.

2. To provide medical equipment, furniture, renovation and trained medical staff for the above centers;
3. To support the repair and maintenance (RAM) center for three years prior to turning it over to GOI for support; and
4. To provide technical assistance and other activity support from the PKMI.

The project was later amended to include the following additional objectives:

1. To upgrade an additional 477 hospitals in the 14 Outer Island provinces as well as those additional hospitals required to provide good coverage in the first 13 provinces;
2. To provide medical equipment, furniture, renovation and trained medical staff for these sites;
3. To provide training and orientation concerning the VS service program to BKKBN and the Department of Health;
4. To provide international and local technical assistance;
5. To establish a medical quality assurance system for all provinces to assure high quality VS services.
6. To develop a private voluntary sterilization clinic network; and
7. To establish a VS reversal center.

#### 1.4 Project Implementation

Phase I of the project was implemented by the BKKBN Bureau of Contraceptive Services, with PKMI playing a very close technical assistance role. PKMI was responsible for the needs assessment, the medical training, the reversal center, and technical assistance activities, but all under the supervision of BKKBN and the direction of the National VS Task Force (consisting of members from BKKBN, the Department of Health and PKMI). BKKBN was only directly responsible for implementation of the upgradation activity.

PKMI has also provided funds for meetings and travel to prospective VS service sites at the branch (provincial) level and project development, monitoring, and general facilitation at the central level.

Hospital and health center upgradation has been carried out based on the results of the needs assessment. The upgradation has included three areas of assistance as dictated by the needs assessment for each facility--facility renovation, and the purchase of medical equipment, and the purchase of non-medical furniture.

VS medical training has been activated at the PKMI- affiliated training centers. At the beginning of the project, there were nine national VS training centers under the PKMI umbrella; by the end of 1988, there were eleven. Training has been carried out for the medical staff in the hospitals included in the project, with a team of one doctor and two paramedics, at a minimum, trained at each institution.

A national VS reversal center has been established in Jakarta.

## 1.5 Evaluation Scope of Work

The first objective of the evaluation was to gauge the extent to which supported activities met project objectives. Quality, quantity and utilization were to be considered.

The second objective was to evaluate at the provincial level the development of institutional capacity to provide services and supervision.

The third objective was to assess the contribution of international technical assistance in improving BKKBN and PKMI's ability to manage the national VS services.

(See Appendix A for the complete Scope of Work.)

## 1.6 Evaluation Team

A four-member team conducted the evaluation from February 23 to March 18, 1989. Members of the team were Dr. Biran Affandi, Professor, Obstetrics and Gynecology, Division of Reproductive Health, School of Medicine, University of Indonesia; Dr. Firman Lubis, Professor, Community Medicine, University of Indonesia and Executive Director, Yayasan (Foundation) Kusuma Buana; Dr. Roy Jacobstein, Chief, Information and Training Division, Office of Population, USAID, Washington; and the team leader, Dr. Alan Margolis, Professor, Obstetrics, Gynecology and Reproductive Science, University of California, San Francisco.

## 1.7 Evaluation Methodology

Prior to the arrival of the evaluation team, BKKBN's Bureau of Contraceptive Services and PKMI assembled and organized all relevant documents (project papers, monthly/quarterly reports, annual plans and corresponding umbrella project implementation letters [PIL]) to enable an expeditious review by the team. The Bureau also prepared a list of all activities funded, by time period and institution (this list was to be utilized by the evaluation team to draw samples).

The first three days of the evaluation consisted of orientation to the task, including document reading, meetings with key resource persons, team formation, and assignment of primary responsibility for specific portions of the evaluation.

The following nine days were filled with two site visits (initially as a group of four and then in groups of two) of three days each, with attendance during the intervening days at the PKMI National Annual Meeting of Provincial Directors. At that meeting, a questionnaire prepared by the team was filled out by the participants (see Appendix L). This was done to meet the need of a more complete view of certain issues than could be obtained at site visits limited in time and number. The results of the questionnaire were collated by Dr. Lubis. Thirty-one responses (60 percent rate) were received, with representation from 24 out of 26 provinces. The results of the questionnaire, while not based on a scientific sample, were useful in confirming impressions and reinforcing the team's findings and conclusions.

During the investigational phase of the evaluation, Dr. Affandi and Dr. Margolis shared the evaluation of the upgradation of hospitals and health centers and the evaluation of the RAM center and reversal unit. Dr. Lubis and Dr. Jacobstein looked at training, quality assurance, the private sector activities, and services in general. Dr. Margolis considered IEC and research; Dr. Jacobstein, PKMI and AVSC; Dr. Affandi and Dr. Lubis, services, priority needs and strategies.

Subsequently, all team members evaluated each segment of the report and reached the consensus represented by this document.

The final eight days in Jakarta were taken up with further document analysis, report writing, additional interviews with active program participants, and presentation of the report to GOI officials and USAID/Jakarta.

The team leader spent an additional two days incorporating modifications in the evaluation based on comments made at the final presentation and the preparation of the complete draft to be left with USAID/Jakarta.

(Listings of sites visited, a daily diary/itinerary, and persons interviewed are found in Appendices B, C, and D.)

## **2. Service Facilities Upgradation**

## 2. Service Facilities Upgradation

### 2.1 Background

The upgradation of service facilities has been undertaken with the purpose of supporting the provision of high quality VS services. In pursuit of the original objectives of the upgradation activities (see Section 1.3), in early 1985, the National VS Task Force prepared a needs assessment questionnaire and distributed it to approximately 500 hospitals in the 13 priority provinces selected for the upgradation activities. Each hospital was also asked to provide a special health center questionnaire to two potential health centers in its vicinity. By mid-1985, 240 hospitals and 300 health centers had returned completed questionnaires. PKMI then submitted a report specifying types of renovations needed for each facility to the Task Force and BKKBN.

### 2.2 Renovation Activities

The renovation activities were carried out at the district level, with all but a few cases under the supervision of the provincial BKKBN office project implementation team.

Each district BKKBN office, in cooperation with the local Department of Health office, developed specifications for the renovations at the hospitals and health centers (usually one to four) approved for renovation. These specifications were sent to BKKBN provincial offices and then to the BKKBN central office for approval. PKMI had developed standard specifications with the help of the Department of Health and expert engineers; PKMI and BKKBN approved the specifications based on these standard specifications. Once the specifications were approved, BKKBN allowed the district to obtain bids following GOI procedures. The winning bid was chosen at the provincial level and forwarded to BKKBN for endorsement and approval by USAID. Following approval at the central level, the contract was implemented; usually, renovations took two weeks to two months, depending on the size of the renovation approved.

The physical renovation of the health facilities included painting, screening, partitioning for privacy, and flooring, where necessary. In Phase I, 201 hospitals and 269 health centers were renovated; Phase II activities started in February 1989, and are planned for completion by June 1989 (this includes renovation of 215 hospitals in all 27 provinces--161 in the initial 13-province area and 54 in the outer provinces. The goal of Phase II is to complete renovation in six months (January to June 1989) and to initiate a more intense monitoring of quality of service, pursuant to an observation made by a few PKMI officials on a recent questionnaire.

In general, the renovations were considered good to satisfactory. In the poll of PKMI provincial officers taken by the evaluation team, out of over 450 sites, only five were mentioned as sites that were poorly chosen and five where the renovations were not done well (see Appendix L).

It is too early to assess the full impact of the renovation work on VS demand. More than 88 percent of the upgraded hospitals are providing VS services. At the present time, however, PKMI officials estimate that only 60 of the 290 (20 percent) health centers that were planned to be renovated and equipped in Phase I are actually performing vasectomies. The remainder are inactive because the doctors have not been trained, the trained doctor has been transferred, or the demand is non-existent despite the presence of an equipped facility. (This was taken into account by the Phase II needs assessment, which funded only hospital sites.)

Also, it should be noted that because the intent of Phase I was to put in place units where the operation could be performed safely, and to train medical teams and counselors to provide high quality services, no provision was made for nationwide IEC. It had been understood that IEC would be the next step in a logical progression of activities. As a result, the family planning workers will only now be officially informed of VS. It is expected that this work force at the grassroots level will be able to increase the demand for VS procedures.

### Recommendation

1. Further activity in the physical renovation of health units is not recommended except in specific instances of need based upon demonstrable demand.

## 2.3 Provision of Equipment

### 2.3.1 Local Purchase

As a rule, all medical equipment needed for this project was to be purchased in the US; that which was not available in the US was purchased locally. BKKBN conducted a bidding process for purchasing selected medical and non-medical equipment, the selected medical equipment was purchased centrally in Jakarta, while non-medical equipment was bid and purchased on a provincial basis, and PKMI provincial inspections confirmed the equipment installations at all sites.

Equipment purchased consisted of the following:

- Equipment to support directly VS procedures;
- Locally obtained medical equipment, kerosene autoclaves, and oxygen systems; and
- Furnishings (benches, desks, chairs, beds, cabinets) to be obtained locally at the provincial level.

(See Appendix G for the specific monies allotted for equipment.)

Phase I. A project audit of Phase I was made on October 7, 1988, by the USAID Regional Inspector General in which the following was noted:

1. Uniformity of standards for furniture was constrained by the many different Indonesian contractors who separately negotiated through each province;
2. Delivery times varied and were occasionally prolonged; and
3. At times the general size specifications did not meet local space requirements.

The audit was closed after responses by USAID/Jakarta noted that Phase II monitoring would be more rigorous and supervisory visits would be made by representatives from USAID, BKKBN, and PKMI, who would ensure adherence to specifications, including the use of high quality solid wood rather than plywood veneer.

The evaluation team's observations of five service sites from Phase I did not elicit evidence of the types of problems noted in the audit. In addition, one service site was already

satisfactorily into the Phase II process. Local purchase equipment also included oxygen tanks with British-type connections not available from US sources.

**Phase II.** Based on Phase I experience, equipment needs were evaluated by PKMI's second needs assessment begun in December 1987, and completed in August 1988. Upgradation under Phase II began in January 1988. Because this portion of Phase II is not complete, it has not been evaluated.

### 2.3.2 US-Purchased Medical Equipment

During Phase I (with the planned upgrading of 240 hospitals and 290 health centers), AVSC was contracted by BKKBN/USAID through buy-ins to provide medical equipment from US sources based on the initial PKMI needs assessment (December 1984 to July, 1985).<sup>2</sup> These items were bulk shipped in seven shipments (April, 1986 to October, 1987) to Indonesia and repackaged by PKMI for transfer to the medical units.

<u>Item</u>	<u>No. Requested</u>
Table, Exam	415
Light, Exam	139
Scale, Weight	148
Meter, BP	811
Stethoscope	858
Table, Operation	103
Light, Operation	416
Table, Instrument	489
Set, Laparotomy	151
Meter, HB	263
Resuscitator, Manual (Ambu)	191
Aspirator, Manual	66
Autoclave, Kerosene	268

### 2.3.3 Utilization of Equipment

**AVSC Evaluation.** From July to August 1988, a three-person AVSC team evaluated medical equipment in the field. They visited ten hospitals (all were performing VS procedures) and five health centers in three provinces--Bali, West Java, DKI Jakarta--(none performing VS procedures). The team's overall impression was that the medical equipment identified in the initial PKMI needs assessment (1985) had been supplied and, in some instances, even oversupplied, as clinical activities had not yet begun at the health center sites that had received equipment. As a result, some equipment was moved to provincial warehouses to be used in Phase II upgradation of facilities.

---

<sup>2</sup>PIO/T 3028, dated September, 1985, authorized US \$1,296,100 for the purchase of medical equipment. The 268 kerosene autoclaves were the most costly items (\$430,140). Additionally, PIO/T 70072, dated October 1988, provides \$563,318.00 for Phase II purchases of similar equipment, with the omission of autoclaves; and PIO/T 70066, dated October 1988, requested 750 minilap and 500 vasectomy surgical kits plus 70 new laproscopators.

The team also made the following recommendations for equipment changes for Phase II:

- A cooler, more focussed operating room light should be sought;
- An electric pump for suction to replace a foot-operated device (which was difficult to use) should be purchased;
- A step should be added to the operating room table for client convenience;
- A more satisfactory hemoglobinometer should be obtained from a different manufacturer;
- A smaller electric or non-electric sterilizer should be sought to replace the current choice (with adequate training of paramedics in its use);
- Phase II should include an equipment survey by questionnaire and quality assurance visits to check on use, effectiveness and repair needs; and
- Redistribution of unused equipment should be considered.

Phase II-funded provision of medical equipment has been planned to include certain of these changes: a better operating room light, an improved operating room table, a better suction machine, and a different hemoglobinometer.

Current Findings. The present evaluation team made site visits to two health centers--one estimated to be in the 95th percentile, the other in the 50th percentile of overall quality of service and appearance. The first site in rural Bali had a doctor who had been in residence for five years and did 34 vasectomies per year. He used a kerosene autoclave, simpler than the AVSC-supplied model. The second site in rural Central Java had performed 11 vasectomies in the past year. Instruments were soaked, not autoclaved. The kerosene autoclave had never been used because no training manual had accompanied it and the paramedic was unfamiliar with autoclave procedures. The doctor stated he needed gloves and scalpel blades to do further procedures despite the obvious deficiencies in aseptic technique.<sup>3</sup>

The quantity and quality of the surgical kits have not been the subjects of significant complaints. There is a need, however, for replacements for worn/unusable instruments of these basic types.

It has been estimated that 500 laparoscopes and laparocators (another estimate is 400) are in Indonesia, some dating from initial shipments by JHPIEGO in the mid-1970s and a few in private hospitals. A recent survey by PKMI prompted responses by 235 hospitals reporting 294 instruments, 222 were laparocators and 72 were BKKBN-purchased Wolf models (100 Wolf instruments are known to have been distributed two years ago). Responses to the evaluation team's questionnaire suggests that an additional 100 instruments have problems and are not in use. Some need simple spare parts and basic repair and maintenance. It is important to note that many of the older telescopes have clouded lenses which are the result of repeated exposures to proteinaceous tissue fluid that reacts with the glass lens and permanently clouds vision. Visual difficulties can prolong or make difficult an otherwise straightforward laparoscopic procedure. Clearly these difficulties are preventable and can be managed by an exchange, one for one, of telescopes without the purchase of a new laparocator kit.

---

<sup>3</sup>A site visit to four health centers performing vasectomies was made during this same period (November 23 to December 8, 1989) by an AVSC official. He also found significant autoclave/aseptic practice problems.

**Recommendations**

- 2.4 An adequate evaluation should be made of the utilization of health center equipment so that redistribution is done when necessary.
3. Minilap and vasectomy kits and falope rings should be ordered in sufficient quantities to replace these expendable items.

---

<sup>4</sup>Recommendations are numbered consecutively throughout the report.

- 12 -

### 3. Training

### 3. Training

Training is a critical prerequisite to increasing service delivery. Perhaps no single factor is more important than the appropriate training of carefully selected trainees committed to delivering family planning services. Training at all service levels--doctor, paramedical, managerial, counselor, fieldworker--increases knowledge and skills, as well as sensitivity to the importance of voluntarism and informed choice. This in turn results in better quality of services. If any single factor can be said to "create demand," it is high quality of services.

VS training (and service delivery) has been successfully institutionalized in Obstetrics/Gynecology (Ob/Gyn) department training centers at the medical student and postgraduate levels -- a major and noteworthy success of this project and of the BKKBN/PKMI/USAID/AVSC collaboration on VS over the past 10 to 15 years.

Under the VS component of the Family Planning Development and Services II Project, training in various aspects of VS was to be provided as follows:

- Clinical training for doctors and paramedics;
- Training of teams in vasectomy;
- PKMI counseling training for health facility personnel;
- BKKBN management and field staff orientation and training to support the provision of VS services; and
- Orientation training by field staff about vasectomy.

(See Appendix H for a detailed listing of applicable implementation letters.)

#### 3.1 Background

In the late 1970s, PKMI, with substantial assistance from AVSC, developed a national VS training program. AVSC supported the VS training program at five university training centers. The Pathfinder Fund, like AVSC an A.I.D./Washington centrally funded Cooperating Agency, supported similar activities at two additional university medical schools. This training program was designed to provide postgraduate training (primarily in tubectomy) to teams consisting of one doctor and two paramedics (nurses or midwives). The program had three components: 1) establishment of training facilities at Indonesian university medical schools across the country; 2) development of standard training curricula, trainee selection criteria, and certification procedures; and 3) provision of funds for administration of the training centers.

By 1981, more than 700 medical teams had been trained. Because this was a sizeable number of trained personnel, and because many of these teams were unable to establish services at their facilities subsequent to being trained, AVSC support of this postgraduate team training was phased out, and PKMI's emphasis shifted to "training follow-up," i.e., service delivery. Postgraduate team training was reintroduced in 1986 as part of the present FPDS project. The university training centers, utilizing their own resources, continued to provide training to medical students as they rotated through the Ob/Gyn departments.

#### 3.2 The Nature of Training

##### 3.2.1 Role of PKMI

PKMI plays a major role in coordinating and conducting essentially all VS-related training in Indonesia--this includes training of medical/paramedical teams, counselors, managers

and field staff (see Appendix I). It performs this role at the request of, and while working closely with, BKKBN and the Department of Health.

### **3.2.2 Clinical Training**

Clinical training, which focuses on teams of one doctor and two nurses, has constituted the bulk of the training in the project to date. Ob/Gyns receive tubectomy training in both laparoscopy and minilaparotomy, as well as in vasectomy (where caseload allows). General practitioners are trained only in minilaparotomy, and in vasectomy (once again, where caseload allows). A trainee must perform ten procedures of each type to be certified. Local anesthesia is the preferred method of anesthesia according to PKMI's VS service guidelines (which are used in all PKMI training centers). The guidelines also present general anesthesia as an acceptable alternative, depending on the situation. In practice, upwards of 50 percent of the laparoscopic and minilaparotomy procedures are performed under general anesthesia (ketamine).

### **3.2.3 Training Sites**

Training is conducted at each of the 11 national (regional) training centers. These centers are managed by PKMI branches and affiliated with the local university medical school Ob/Gyn department.

### **3.2.4 Trainee Selection**

Trainees are selected by the provincial VS Project Committee (composed of BKKBN, PKMI, the Department of Health, the Provincial Development Planning Board [BAPPEDA]), based upon Department of Health recommendations. Selection criteria emphasize training personnel from those health facilities that have been recently upgraded.

## **3.3 Training Outputs**

An impressive amount of VS-related training has taken place or will in the near future, and, in general, this component of the project has been satisfactorily implemented.

### **3.3.1 Medical Team Training**

During Phase I, 252 medical teams were trained: 71 from health centers and 181 from hospitals (17 Ob/Gyns; 164 GPs). This represents 52 percent of the planned number of teams trained. The shortfall of 48 percent in the number of trainees occurred disproportionately among health center teams--67 percent of the goal for hospital-based trainees was met (181 teams trained of 269 planned), whereas only 33 percent of health center teams were trained (71 teams trained out of the planned 218.) The major explanation for this shortfall was the lack of an adequate clinical caseload to support vasectomy training. (Appropriately, for this reason, further upgrading of health centers was not included in Phase II of the Project.)

During Phase II, 311 teams are to be trained, 75 from hospitals and 236 from health centers, and a number of valuable new training activities for the VS component have been added: counseling training, field staff training, technical information and referral training in vasectomy, and training of BKKBN and Department of Health management. The status of these activities is described below and also presented in Appendix I.

Overall, total VS medical team training to date has resulted in upwards of 1,200 doctors' and 1,800 paramedics' having received VS clinical training. (These numbers reflect efforts

other than those supported under this project; AVSC, Pathfinder, UNFPA, and USAID/BKKBN have all supported various training activities.)

### **3.3.2 Counseling Training**

Since 1985, when an AVSC-funded and assisted pilot project with the purpose of developing national counseling and training-of-trainers curricula began, PKMI branch training centers have trained over 1,000 counselors, and will train 300 more by March 1990. This represents approximately 100 percent of the goal for counselor trainees under the project.

### **3.3.3 Fieldworker Training**

From April to June 1989, 20,000 fieldworkers (including 3,000 fieldworker supervisors) will have received two days of orientation training from BKKBN about VS, with a focus on referral, counseling and follow-up. This is a key part of the overall VS development strategy.

### **3.3.4 Technical Information and Referral Training in Vasectomy**

In April 1989, 240 fieldworkers in eight provinces are scheduled to receive special orientation training about vasectomy to assist the vasectomy training program (by increasing vasectomy referrals and thus the clinical training caseload.)

### **3.3.5 Training of BKKBN and Department of Health Management Staff**

Also, during the period April to June 1989, orientation and referral training will be provided for over 2,000 provincial, district, and subdistrict management staff.

### **3.3.6 Training of Community Leaders**

This training took place in December 1988. One hundred and forty-eight leaders in one province were instructed in VS information and services availability. Plans have been made to train 450 more leaders in three additional provinces by December 1989.

### **3.3.7 University Research Corporation (URC)-funded Training**

This training was provided by PKMI as part of a pilot project in four provinces in March 1989 for 515 doctors, midwives and fieldworkers who are being provided with comprehensive training in VS referral, screening and follow-up.

## **3.4 Training Issues**

### **3.4.1 Evaluation of Training**

A comprehensive evaluation of training activities, strategies and accomplishments has not yet taken place. Follow-up and evaluation of trainees specifically, as well as an overall evaluation of the training program, need to be implemented.

### **3.4.2 Tubectomy Training for Various Types of Medical Personnel**

Out of the approximately 20,000 doctors in Indonesia, about 400 are Ob/Gyns, with only 50 new Ob/Gyns finishing residency training each year. Thus, the bulk of the doctors

potentially available to meet an increased demand for VS services will be GPs and surgeons, who will be providing tubectomy primarily, via a minilaparotomy procedure. Minilaparotomy under local anesthesia, therefore, must increasingly become the primary emphasis in training. This emphasis will have accompanying advantages from the standpoint of safety as well; analysis of recent international experience with VS-related mortality cases points to the use of general anesthesia as a common cause of mortality. (Laparoscopy training will appropriately continue to be provided to all Ob/Gyn specialists in training.)

### 3.4.3 Vasectomy Training

Vasectomy training has not been carried out to the extent originally envisaged. This is because this training is dependent on adequate caseloads--ideally ten or more cases per trainee--which at present are not available at many training sites. The average number of vasectomies performed annually in Indonesia from 1980-81 to 1987-88 was approximately 11,000. However, about 9,000 of these vasectomies were performed in the three provinces of Central Java, West Java and Yogyakarta. The average for the remaining 24 provinces was only 80 to 90 procedures annually--far too small to support general vasectomy training at this time. Indeed, even in 1988, 18 provinces reported fewer than 100 vasectomies performed annually, with seven provinces reporting fewer than ten procedures. This pattern has been essentially unchanged for the past ten or more years (except for 1988, when vasectomies in the first six months increased almost 50 percent over the previous year). Strategies for increasing vasectomy caseloads are needed and are being considered by PKMI. For example, efforts to alleviate this constraint are being made by identifying subcenters of vasectomy activity to which trainees will be assigned, or moving trainees to areas with case numbers sufficient for training.

### 3.4.4 Trainee Follow-up

Provincial chapters of PKMI now have a policy of follow-up for 50 percent of all medical training teams, but they do not have sufficient funding or staffing to follow up regularly with all of their medical trainees. This is an expensive and time-consuming process but it is important both in itself and as an integral part of an overall monitoring and supervision system. Follow-up soon after training has been received is particularly important to see that services are being provided, and that quality, safety and voluntarism are present.

### 3.4.5 Trainee Selection

Not all doctors are equally and fully committed to family planning in general or to VS in particular. Furthermore, a number of doctors trained under the project either had many other responsibilities which limited the time they could devote to providing VS services or were transferred soon after their training was completed. These constraints had a subsequent impact and contributed to variations in VS service delivery performance at upgraded facilities.

## Recommendations

4. A comprehensive training evaluation/needs assessment should be conducted as soon as possible to assess more fully and systematically the impact of past training activity, as well as the short- and long-term needs for clinical (including refresher), counselor, and fieldworker training in the future.
5. An ongoing evaluation component should be built into all training activities conducted in the future as part of the project. Meaningful evaluation of training is difficult, but it must address such important issues as the quality and impact of

training. The number of functioning teams, constraints to service delivery, future needs, gaps, quality and effectiveness of training should also be addressed.

6. Minilaparotomy with local anesthesia should be the standard for training for GPs and surgeons, as both the safest method and the one best suited to the Indonesian medical personnel situation. (Minilaparotomy will have to become the primary surgical method if BKKBN's ambitious VS prevalence goals are to be met.) Ob/Gyns should have training in both laparoscopy and minilaparotomy, and be capable of training and supervising other doctors in minilaparotomy with local anesthesia. Careful instruction in perioperative monitoring and care of the airway, as well as in cardiopulmonary resuscitation (CPR) methods should be included in all clinical training. When general anesthesia (ketamine/ketalar) must be used, one member of the surgical team should be capable of endotracheal intubation.
7. Clinical training of medical teams should be continued, linked to assessments of local utilization levels and projected demand, and supported by a sufficient training caseload.
8. There should be a continuing emphasis on the training of counselors and fieldworkers. Given the relative constraints on IEC for VS which exist and are likely to continue in Indonesia (see Section 9.2), one of the most potent forces for increasing service delivery is the referral capacity of BKKBN field staff. Concomitantly, good counseling training to ensure voluntarism and informed choice, and ultimately, client satisfaction, is both politically and programmatically sound. Refresher training will also be needed.
9. In all training, the intended permanency of VS must continue to be emphasized.
10. Increased support to PKMI from USAID and AVSC is highly recommended to enable paid medical personnel at the PKMI branch level (the same individual responsible for overall monitoring and supervision of quality) to follow up with all trainees within two to four weeks of their training to see that the trainee is performing VS procedures. If he is, surgeries can be observed; if he is not, analysis of the reasons can be made so that corrective action can be taken. Longer term follow-up should also be conducted.
11. Operations research studies or evaluation efforts are recommended to address key training issues such as the study of high-performing VS sites to determine causes for success and feasibility of replication through training. Other areas for study would be optimal trainee selection and follow-up, and the impact of counseling and clinical training on client satisfaction and quality of services.
12. Trainees should be carefully selected, taking into account individual motivation and commitment to provide family planning/VS, as well as location (i.e., high actual or potential demand in the service catchment area).
13. There may be an ongoing need to train health center (*puskesmas*) personnel. If so, the need should be determined by a well-considered needs assessment (See No.1 above). As a policy, whatever further training of doctors at the *puskesmas* level still may be needed should be done within the first six months of the doctor's assignment to the (upgraded) *puskesmas*.

14. Conversely, another strategy to consider would be a program under which doctors from provincial or district hospitals would regularly visit selected health centers to provide vasectomy services. If any such program is instituted, it should be referred to as "assisting," or "outreach to" "satellite centers," rather than making reference to "mobile teams" (or "safaris") since these latter terms have negative connotations in a US context.

## 4. Support of Repair and Maintenance (RAM) Center

### 4.1 Purpose of Center

Between 1974 and 1984, PKMI developed a repair and maintenance capability for VS equipment with support from AVSC, New York. The RAM center was in PKMI headquarters, with six subcenters: Medan, Jakarta, Bandung, Yogyakarta, Surabaya, and Manado.

There was one full-time technician in the center and one-part time technician in each subcenter. Simple repairs were carried out by technicians in the subcenters, while complicated repairs were handled by the technician at headquarters.

The original objective was to support the RAM center for three years prior to turning it over to the GOI to provide support. In 1984, the RAM center funding was taken over by BKKBN with USAID funds for a period of two years. During this transition period it was hoped that BKKBN and PKMI would develop a system for government support or find some other alternative approach to take over the project funding. But when these funds were depleted in early 1986, there was no additional funding available for the RAM activities from local resources.

### 4.2 Need for Center

More than 400 laparoscopes are in use in Indonesia. They are used both for female sterilization procedures and diagnostic procedures. About 90 percent of the regency (district) hospitals have a laparoscope, and 40 to 50 percent of tubectomies are performed by laparoscopy by Ob/Gyn doctors. It is reported that about one-third of these laparoscopes are in need of repair. The existence of a functioning central RAM center in Jakarta and subcenters for immediate simple repairs is necessary to ensure high quality services without interruption.

### Recommendations

15. Reactivate the RAM Center at PKMI's Central Office.
16. PKMI and BKKBN need to develop a system for government support or an alternative approach to take over the funding.

## **5. Provision of Technical Assistance (TA)**

## **5. Provision of Technical Assistance (TA)**

### **5.1 Background**

Since VS is not now, and has never been formally included in the national family planning program, PKMI has been requested to play an important role in the VS services. In this project, PKMI provides technical assistance to BKKBN in several areas: needs assessment, planning, purchase of medical equipment, and training. PKMI is also involved in supervision and monitoring to provide quality assurance for VS services.

### **5.2 Quality of Technical Assistance**

While PKMI plays a major role in providing TA to the project, it does not have an adequate number of staff with sufficient capabilities to perform the tasks involved. For example, the TA is inadequate in the areas of supervision and monitoring of medical and surgical procedures because there is almost no staff with both the technical expertise and credibility necessary to perform this task (there is only one MD on staff, the Director of PKMI). There is also no staff at present with adequate expertise in effective data management systems; and at the provincial level, PKMI's paid staff consists only of a secretary/typist. Importantly, concrete plans and policies defining PKMI's role have not been formulated.

### **Recommendations**

17. PKMI should recruit one full-time staff member with adequate technical expertise to manage the supervision and monitoring systems that are essential to quality assurance of services. Consultants on medical quality assurance should be used on a per diem basis to conduct supervision and investigation at the service centers.
18. Concrete long- and short-term planning for PKMI's role in providing TA to BKKBN on VS services must be made. This plan should be based realistically on PKMI's strengths and weaknesses, with PKMI taking the lead rather than being formulated as a response to outside initiatives or offers.
19. Provincial PKMI offices should be encouraged and strengthened in providing TA to the provincial VS services. PKMI's central office should support this decentralization process.

**6. Establishment of Nationwide Quality Assurance (QA)  
and Surveillance Systems**

## 6. Establishment of Nationwide Quality Assurance (QA) and Surveillance Systems

### 6.1 Background

Quality assurance is one of the major issues confronting VS services in Indonesia. Several recent reports have indicated the need to improve both the medical and non-medical aspects of VS services. Additionally, because it is planned to expand VS services in the next *pelita* (five-year development period) to double the present number of approximately 125,000 procedures per year to about 250,000, quality assurance is of critical concern. If a concerted effort to improve the quality of services is not undertaken, the proposed VS expansion might reflect badly on the whole family planning program, because the political environment is still not uniformly receptive to VS service.

### 6.2 Quality Assurance Activities

BKKBN, PKMI, and the Department of Health, with USAID support, have tried several activities in an effort to assure quality of service:

- Manuals and reporting forms have been produced by PKMI;
- Training for both medical and non-medical personnel in fulfilling quality assurance goals have been conducted;
- International consultants have assisted in looking more carefully at quality assurance problems and have made recommendations for improvement;
- Studies regarding quality assurance have been carried out by AVSC and URC that indicated serious weaknesses in the system;
- A pilot project on medical supervision and surveillance systems in five provinces carried out with funds from AVSC and Pathfinder, has lead to the inclusion of a plan in Phase II of the current project to implement a comprehensive and cost-effective national VS supervision and surveillance system in all provinces; and
- A new pilot project with USAID funds was carried out in four provinces in the second half of FY 1988-89, and a 13-province activity will start in FY 1989-90.

Despite all of these efforts, however, an adequate system of quality assurance for both medical and non-medical concerns has apparently not yet been established, as indicated by the following:

- There is still no mechanism or structure at either the central or provincial level to cope adequately with QA problems. There is no staff assigned specifically to manage QA reports from the field. Reporting to the central office is slow and inadequate, and feedback is insufficient.
- There is no immediate (within 24 hours) reporting to the central level of deaths and major complications requiring hospitalization. Reports of four deaths in 1988

were all known first from newspapers and thorough investigations of these deaths were not carried out in a timely fashion (less than one week).<sup>5</sup>

- Although the number of deaths and complications are within the normal range, improvements in the quality of medical procedures is needed. Sterile procedure (aseptic technique), especially in regency (district) hospitals and health centers/clinics, needs to be improved. Surgical and anesthesia standards for tubectomy and vasectomy are still not uniformly followed. Big variations among hospitals in these standards were found in the responses to the questionnaire sent to PKMI provincial officers.
- Supervision and monitoring are still not implemented adequately. Medical supervision is not carried out by capable, highly regarded, and motivated medical experts. Medical reporting forms are overly complex and hard to understand and the terminology used is open to different interpretations.
- Although counseling is provided in many VS service centers, improvement is needed in this area. The extent and quality of counseling is not always given adequate attention by service providers. In addition, counseling standards are not uniformly followed and counseling is carried out in a variety of ways by doctors, paramedics and special personnel. While regret following VS service is relatively low in Indonesia, counseling is very important due to the sensitive nature of VS.

#### Recommendations

20. A special unit to deal with medical quality assurance should be established at the central level. This unit should manage and analyze all incoming medical reports. It should then provide feedback to the service providers. This unit might best be located at BKKBN's central office and supported by epidemiologist(s) on a part- or full-time basis. Similar, smaller units should also be established in major provinces with a high number of VS acceptors. Decentralization and active involvement at the provincial level in medical quality assurance should be encouraged.
21. Reports of death and serious complications requiring hospitalization should be reported immediately (within 24 hours) to the provincial level as well as to the central level, to BKKBN (the quality assurance unit), PKMI, and, if need be, to the Ministry of Health (or they can be contacted by the BKKBN and PKMI). This would be carried out through a "hot line" channel separate from the regular reporting system. Immediate and thorough investigations of deaths should also be carried out by medical experts from the province or central level.

---

<sup>5</sup>Since 1984 there have been eight reported deaths (see Appendix J) out of the 519,000 VSs performed, giving a mortality rate of 1:5/100,000 cases--a very low mortality rate. Four of the deaths were presumed to be due to bowel injury, and four presumed due to intra-abdominal hemorrhage. The four deaths which occurred in 1988 were evaluated by the two Ob/Gyn teams members based on the PKMI reports. The earlier deaths were noted by a PKMI summary chart only. There have been no clusters of deaths reported. (It is possible that more deaths and major complications will be reported in the upcoming years as reporting, supervision, and monitoring become more completely implemented, and the number of VS procedures performed increases.)

22. An agreed-upon standard of VS service should be reinforced. Information on surgical and anesthesia procedures, as well as other factors that could indicate the quality of the services, should be carefully analyzed and followed up. Adequate measures to assure quality of service such as discussions in meetings or at an annual workshop of PKMI should be taken. Use should also be made of other channels such as POGI (the Ob/Gyn professional association) and the Indonesian Medical Association (IMA).
23. Supervision at the central and provincial levels should be strengthened. Guidelines for supervision (what to supervise, findings, recommendations, etc.) should be strictly followed. Supervision should be done regularly by capable and reputable medical experts. PKMI, BKKBN and the Department of Health should be aware of the great importance of follow-up of supervision. Medical reporting forms should be simplified--this should be the first task of the central quality assurance unit. Feedback on these reports should be given immediately to the service centers. This could be presented through a clear and practical bulletin or newsletter format.
24. Counseling prior to and after VS procedures should be carried out conscientiously and consistently following the existing guidelines. Training for special workers (fieldworker supervisors and paramedics) is important. Counseling should be supervised.

-Ue'

## 7. Private Sector Activities and Plans

## 7. Private Sector Activities and Plans

### 7.1 Background

As with other contraceptives, until now most VS services have been provided by the public sector,<sup>6</sup> with only limited private sector provision. Only in certain provinces such as Yogyakarta and Semarang, have private organizations like PKBI, the Indonesian Planned Parenthood Association, and Bethesda Hospital, made significant contributions to VS services.

At the present time, there is a great deal of interest on the part of the Government of Indonesia in increasing the proportion of family planning users who obtain their family planning services from private sources, thus decreasing the burden on the public sector. In keeping with this current emphasis on BKKBN's "KB-Mandiri" or "self-sufficient family planning" concept, Phase II of the FPDS project includes three activities to explore the establishment and support of private, fee-for-service VS facilities:

1. A survey/needs assessment of various private medical service sites with the potential to deliver VS services;
2. Preparation of an implementation plan of action for a package of technical and financial assistance to these potential fee-for-service VS providers; and
3. Preparation of standard criteria and guidelines, and needed financial and technical assistance for service delivery based upon items 1 and 2. The financial and technical support was to be "provided from BKKBN to the private sector...for establishing and/or expanding VS services in potential private sector health facilities, including large size maternity and factory clinics as well as appropriate private doctor practices."

### 7.2 Achievements to Date

In practice, this project component has been very slow in getting started. In January 1989, the results of the first part of the needs assessment did not indicate much interest on the part of private practitioners in the Indonesian Doctors' Association (IDI). For that reason, the focus was shifted to a small number of group practices, which are currently being inventoried, and will subsequently receive needs assessment questionnaires. Based upon the results of this needs assessment, a program to assist these group practices is envisaged.

The Private Sector Family Planning Project (PSFPP), which will succeed the current FPDS II project in fiscal year 1990, is designed to provide further support to both the private and public sectors in the provision of family planning services, including VS.

---

<sup>6</sup>Most of the VSC services have been given with a minimal charge by the hospitals and health centers. The evaluation team's mini-survey of PKMI province officials indicated a range between 0 to Rp. 30,000 with an average of Rp. 10,000 for tubectomy and 0 to Rp. 6,000 with an average of Rp. 3,000 for vasectomy. All providers mentioned that they are subsidizing the VSC services they provide. The actual cost to the hospitals is higher than what they receive from the clients plus the subsidy from BKKBN. The actual cost for tubectomy is Rp. 40,000 on average and for vasectomy it is Rp. 15,000. The subsidy for operational costs for VSC services provided by BKKBN is regarded as very helpful.

**Recommendations**

25. Those private sector providers who have demonstrated a commitment to VS service should be supported in an effort to reduce the burden on the government sector.
26. Subsidization or assistance to VS procedures by the program should be maintained and increased to support service to low income clients served by the private sector who are unable to pay the full cost.
27. Mechanisms such as insurance or a "credit" system should be explored in order to make it more feasible to go to the private sector for VS service.

## 8. Establishment of a Reversal Center

### 8.1 Background

Phase I of the FPDS II project assigned funds in 1985 for the establishment of a microsurgery unit in the Department of Obstetrics and Gynecology, University of Indonesia, Jakarta. The unit was to serve as a pilot to determine the need for additional microsurgery centers in Indonesia. Provincial experts were to screen and select candidates for reversal. A provision was made for the option of supporting a limited number of surgeries on infertile couples with tubal obstruction. There was to be a total of 25 patients over a two-year period. Additional monies were provided at a later date (1987) to support further clinical patient care at the reversal center at the level of 10 to 15 cases per year. A review of the project was to occur after "some" experience was obtained.

The reversal center, which opened in April 1986, is located at Clinic Raden Saleh in the heart of Jakarta. The clinic building is a maternity hospital which has been renovated to become a reproductive health center providing a variety of services to women with fees on a sliding scale. It is geographically separate from the major university teaching hospital and is staffed by Ob/Gyn faculty and residents. It is one of the eleven VS teaching centers in the country and is part of the core clinical teaching of medical students at the medical school of the University of Indonesia. The clinic has two general operating rooms and one dedicated to the reversal center. A resident anesthetist whose training includes laryngoscopy/intubation is available as part of a six-week regular rotation. Appropriate general anesthesia is regularly available.

### 8.2 Evaluation of Activities

A site visit to the clinic was conducted on a working day and confirmed the effectiveness of medical and paramedical personnel. There is an active post-anesthetic recovery area and single- and two-bed, hospital-type rooms for a total of six patients. In summary, the physical plant and the staff were qualified to carry out the proposed procedures.

The operating room was orderly and the appropriate technical equipment was present, including an operating microscope, micro-surgical instruments, appropriate suture materials and an electro-surgical unit.

Interviews were conducted with the two Ob/Gyn faculty members responsible for reversal procedures. Both have had specialized training in VS reversal, one at Johns Hopkins under the auspices of JHPIEGO, the other in Singapore at a special course given by an internationally respected microsurgery pioneer. Ten tubectomy reversals have been performed in the last two years (there have been no vasectomy reversals).<sup>7</sup> Technical expertise and hand-eye coordination cannot be maintained at this level of activity. Both doctors, however, stated that they participate at least once weekly in other microsurgery procedures involving various forms of infertility treatment.

Of the eight women on whom recanalization was performed more than six months ago, only one has become pregnant. Five of the ten women were 35 or over, which tends to decrease their ease of conception and explains the relatively low (12 percent) success rate as compared to international figures which range from 20 percent to 60 percent.

---

<sup>7</sup>A chart of the details of the 10 cases appears in Appendix J.

Comments from staff during the field visit suggest that some petitioners for reversal are discouraged from making requests for the procedure because they have been told that the operation is not available or very risky or difficult to obtain. On the other hand, there has been a tendency on the part of some to suggest that "untying" was so easy that the tubectomy could be considered reversible and thus so non-injurious as not to warrant conservative religious proscription.

Recommendation

28. It is recommended that USAID continue to fund the Raden Saleh unit as the single national reversal center. At the current rate of reversal procedure requests, the center could care for the number of reversals which would occur with the doubling of the current number of sterilizations.

## 9. Additional Implementation Issues

### 9.1 Institutional Capabilities and Roles of Concerned Organizations

#### 9.1.1 BKKBN

The role of BKKBN as the Government family planning agency which supports VS services is very critical. Without BKKBN support, it would be difficult to increase VS demand significantly. Although BKKBN still does not include VS in its official range of contraceptive services, it has shown a strong commitment to it. BKKBN's role has been primarily that of a backup to the VS services, in that BKKBN has allowed PKMI to function as the implementor of the activities which BKKBN endorses.

Through past and current VS projects supported by USAID, BKKBN has tried to increase the number of VS services in all provinces. BKKBN personnel such as the family planning fieldworkers are being trained currently to include VS in their motivation activities. In its Blue Circle program<sup>8</sup>, BKKBN has included VS as one of the five contraceptives endorsed. So far, all these efforts to increase VS services have not created any problems for the family planning program. With the current achievement in contraceptive prevalence and the potential demand for VS, BKKBN plans to continue its commitment to support the expansion of VS services.

#### Recommendations

29. The role of BKKBN in supporting VS services has to continue. One important area that should be emphasized is in supporting the quality assurance of the VS services-both the medical and non-medical aspects.
30. BKKBN must continue to create a better environment for VS acceptance especially among religious leaders. Voluntarism, appropriate and effective IEC, and safety procedures should be strengthened by BKKBN through its support of PKMI.
31. In close collaboration with PKMI, the BKKBN Bureau of Contraceptive Service should strengthen its commitment to supervision, monitoring, and surveillance of VS services.

#### 9.1.2 PKMI

At its inception in 1974, PKMI's objective was to promote VS as an addition to the family planning methods then in use in Indonesia and to assure that the services provided would be of high quality and based on informed consent. Over the intervening years, with continuing AVSC assistance totaling about \$6 million, PKMI has contributed significantly to the development and quality of VS services through a variety of activities that include training for counseling and medical techniques, provision of technical information, research, the development of surveillance and monitoring procedures, and the provision of VS services. To carry on its work, PKMI has established branches in 26 of the country's 27 provinces.

PKMI's Role and Activities. In the absence of a national policy regarding VS services, PKMI is a major factor in the efforts to provide and expand VS demand and services.

---

<sup>8</sup>This is an IEC and CSM effort included in the Urban Component of the FPDS II project.

Its central staff, however, is small and needs reinforcing. Much of its activity is carried out by branches that are staffed mainly by member volunteers who also have teaching or service responsibilities and carry on private practices. Almost all branches would like to open fee-for-service clinics to raise funds for their operations but they lack the means to establish such facilities.

One continuing operating problem for PKMI is that, while it has responsibility for the projects it undertakes, it has no authority (except in cases where it is paying a salary to someone) to assure that its wishes are being carried out. It cannot require a staff member of a government hospital, for example, or a branch member to do anything that he or she does not want to do. Its sole recourse in these instances is to be patient and persuasive and hope that, even in the absence of effective leverage, things get done properly. This is a management constraint that both PKMI and those organizations that help to fund it must learn to live with. Partly balancing this limitation is the fact that much of the VS service provided in Indonesia is done by PKMI members in their roles as government employees or private practitioners who have the opportunity to know about, and directly or indirectly approve what they are being asked to do.

Current PKMI activities include assistance to the USAID/BKKBN project to expand and improve service facilities in the areas of conducting a second needs assessment, medical supervision, provision of publications and forms, training of medical and counseling personnel, and field level personnel orientation and support. It is also engaged in two operational research studies and is working with FPIA to train personnel and provide VS service in private clinics.

BKKBN is presently testing whether it can openly and substantially expand its VS activities without arousing religious opposition. If this proves possible, PKMI's role is likely to change. Its new role would include such activities as provision of technical assistance to the national program; establishment of pilot programs and evaluation of their results; operational research in different aspects of service provision; and the development and operation of information systems.

Organizational Structure. PKMI's central office is the unit that deals with local and external agencies to accept and carry out projects of mutual interest. Because its staff is not sufficiently large to enable it to carry out projects directly, its principal role thus becomes one of managing and monitoring the activities for which it is responsible. Unfortunately, as noted above, this principal role cannot be fulfilled completely.

PKMI members are organized into branches in 26 of 27 provinces of Indonesia. Ten branches are located in the Ob/Gyn Departments of medical schools, the remainder in Ob/Gyn departments of provincial hospitals.

The branch structure is simple. There is a Branch Committee elected by members for a period of three years. This committee consists of a Chairman, a Secretary, a Treasurer, and one other member. Each branch has one full-time secretary/typist paid by PKMI with AVSC or FPIA support, but branch officers are not paid. Branches with special projects (like the vasectomy pilot projects in Semarang, Bali, Yogyakarta, and Jakarta, funded by AVSC) receive special support for such part-time staff as Project Manager, Project Administrator, Bookkeeper and Messenger. As a general rule, part-time staff are people who work in the hospital or school of medicine in which the branch is located and who receive a supplementary salary to perform specific duties related to the project.

PKMI branch members are the leading Ob/Gyns in each province. Because they are chiefs of Ob/Gyn departments in Government hospitals, or Ob/Gyn physicians at service sites attached to the official sector through their involvement as professors in medical schools, these branch members are able to promote and facilitate the establishment of VS services and provide supervision of them. However, they have only a limited capacity to plan and execute projects.

As a general rule, branch managers are usually very busy both because they are official employees at the hospitals and also maintain an active private practice that generates most of their income. It would be unrealistic to expect these persons to dedicate more time to the branches since this would imply a reduction of their private activity. Therefore, the possibility of travelling to supervise projects assigned to them by PKMI must be re-evaluated to examine if it is adequate and realistic.

The evaluation team concluded, from its limited experience, that the main strength of the branches is based on the fact that its members are highly respected public officials responsible for Ob/Gyn care in their provinces, and, as such, have supported the implementation of VS services in provincial hospitals. On the other hand, the evaluation team considered that the limited availability of branch members makes supervision and monitoring, or evaluation of projects difficult as long as PKMI's central level does not provide more technical support, adequate training, and enough competent support personnel.

### Recommendations

32. USAID or AVSC should support the augmentation of PKMI professional staff. This should include an additional physician at the central level who would be responsible for overall quality of VS services including counseling, monitoring, supervision and trainees follow-up.
33. Increased assistance should be made available to PKMI to support qualified clinicians (on at least a part-time basis) at certain active branches in strengthening quality assurance, trainee follow-up, counseling and regular monitoring and supervision activities.
34. A central unit for medical QA and data analysis should be established by a joint BKKBN/PKMI effort to provide timely reports, analysis and feedback to the branches. The unit should have strong support from and close links to BKKBN. It should produce a quarterly newsletter which can be a vehicle for information, education and improvement of standards. The first activity of this new unit should be the introduction of a simplified VS medical reporting form.
35. PKMI should establish a standard reporting procedure whereby VS-related mortality and serious morbidity requiring hospitalization are reported to central as well as provincial BKKBN and PKMI levels immediately (i.e., within 24 hours). BKKBN, PKMI, USAID and AVSC must all work to see that this important activity is instituted and followed. In all relevant PKMI meetings, the issue of QA in general, and reporting of serious problems in particular, must be addressed.

### **9.1.3 Association for Voluntary Surgical Contraception (AVSC)**

AVSC is the premier A.I.D.-funded organization in the world dedicated to increasing the availability of quality VS services. It has worked in over 60 countries since the establishment of its International Programs Division in 1971, and has accrued a wealth of experience and expertise in many aspects of VS service delivery. A.I.D./Washington entered into its most recent Cooperative Agreement with AVSC in 1988 for a program which emphasizes 1) increasing access to VS in underserved populations and groups; 2) improving the quality of existing VS services; and 3) ensuring voluntarism and informed choice in A.I.D.-supported family planning programs. To further these goals, AVSC provides support for services, training, and IEC, as well as technical assistance, as needed.

**Relationship to PKMI.** AVSC's role in Indonesia dates back to 1974 when it provided technical and financial assistance to support the establishment and work of PKMI. Since that time, AVSC has continued to assist in PKMI's growth and development, as PKMI became the lead organization in Indonesia responsible for VS-related activities. AVSC has provided direct assistance totaling over \$6 million (this has been drawn primarily from its central funds, supplied by A.I.D./Washington) as well as technical assistance to meet a number of PKMI goals and objectives. This assistance has allowed PKMI to expand and to contribute significantly to the provision of quality VS services and training, and to the dissemination of technical information. As PKMI has expanded its operations, AVSC has provided a large proportion of the core support needed for PKMI to operate as an effective NGO.

PKMI is essential for stimulating and meeting the current and future demand for high-quality VS services in Indonesia. Technical and financial support to PKMI (central and branch offices) is still vital, and desired by USAID, BKKBN and PKMI. The nature and extent of such support, however, needs to be clarified. AVSC's support to PKMI from its central funds (supplied by A.I.D./Washington) has declined steadily over the past few years. This has occurred at the behest of A.I.D./Washington as its priorities shift to other regions and to countries lacking a bilateral USAID program. This does not mean that AVSC (or A.I.D./Washington) attaches any less importance to the Indonesia program, but simply that more of the needed activities and assistance may have to be secured through buy-ins.

**Strategy Meeting and Workplan.** A strategy and workplan for AVSC's activities in Indonesia needs to be agreed upon, written, and implemented. A strategy meeting held in June 1988, between USAID, BKKBN, PKMI and AVSC (which was the first recommendation of AVSC's 1988 assessment report) did not result in an annual workplan, nor did it fully resolve all issues. (However, as a result of that meeting PKMI prepared a detailed five-year plan and a proposal to AVSC.) A follow-up to this meeting, which would involve the four organizations in reviewing and updating strategies and assessing needs, would be useful.

**AVSC/New York.** Technical support from the central (N.Y.) office of AVSC to PKMI for a number of important activities--the counseling workshop, assistance in financial planning, and other management strengthening aspects--has been excellent. AVSC's assistance with the procurement of medical equipment (a major part of the project and a considerable undertaking) was judged by both USAID and AVSC to have been well done and invaluable to the overall VS program.

Another of AVSC's important contributions is its provision (via a USAID buy-in to AVSC's Cooperative Agreement with A.I.D./Washington) of a Resident VS Advisor to BKKBN. The Resident Advisor's work is highly valued by USAID, BKKBN and PKMI, and he has the respect and trust of his colleagues in all three organizations. The evaluation team's independent assessment is that he has made and continues to make key contributions to the growth and development of the VS program. Unfortunately, while his role in the program is clear and his presence is vital, his role vis-a-vis AVSC/N.Y. and the AVSC Regional Office has been unclear to some. An effort should be made to clarify his role and resolve any misunderstandings that might still exist.

**AVSC/Dhaka Regional Office.** Technical support from the AVSC Regional Office in Dhaka has been insufficient. This was noted in AVSC's own excellent 1988 assessment report of PKMI (drafted March 1988 and finalized June 1988) which concluded that, regarding PKMI, AVSC had "not recently been providing much needed advice and guidance. There is a real need for...an increase in the quality and quantity of staff visits from the regional office." The evaluation team finds that this conclusion is still valid. (Since the AVSC assessment team's March 1988 visit

to Indonesia, there have been only three visits from the Regional Office, totaling approximately 15 days. Only one trip report was submitted to USAID.)

**USAID/AVSC Relationship.** There have been strains in the relationship between USAID and AVSC which both organizations acknowledge and hope to address and alleviate. It is reflected in differing perceptions of the VS program in Indonesia which are at greater variance than the underlying reality warrants. These differing perceptions have been exacerbated by inadequate communication between USAID and AVSC. (This was also noted in AVSC's own assessment report of PKMI which recommended "increased communication with USAID to improve mutual understanding and facilitate joint planning for PKMI's program strategy and implementation.") For example, AVSC feels "under-consulted" and that its considerable experience and expertise is not being drawn upon. USAID acknowledges this expertise, but feels that the "under-consultation" stems from AVSC's lack of regular in-country presence. USAID feels that whenever concerns have been raised by AVSC, they have then been acted upon, but that these adjustments have not necessarily been recognized by AVSC as having occurred, owing to gaps in communication. The evaluation team notes that the situation regarding VS in Indonesia is indeed fluid and relatively fast-breaking, rendering it difficult to keep abreast of the situation without being in country often and for sufficient duration.

### **Recommendations**

36. USAID and AVSC should meet as soon as possible to discuss issues of mutual concern, and to agree upon an annual workplan for AVSC's activities in Indonesia. Further meetings should be held between AVSC, USAID, PKMI, and BKKBN as a follow-up to the strategy meeting of June 1988 to review and update strategies and needs for assistance for VS, and to reach a mutual agreement on priority activities and funding sources.
37. AVSC should augment its presence in Indonesia. PKMI (as well as BKKBN and USAID) welcomes AVSC assistance--which needs to be strengthened in a number of technical areas, e.g., program planning, evaluation, monitoring and supervision--to cope with the increased activity it is being called upon to perform. If buy-in funds are available, an in-country representative should be considered; in any event, a close and regular working relationship between AVSC and PKMI should be maintained.
38. The current VS Advisor to BKKBN should continue to be funded through the same funding mechanism (a USAID buy-in to AVSC). AVSC, A.I.D./Washington and USAID, need to work to resolve any ambiguity and lack of clarity in his roles and responsibilities vis-a-vis AVSC.

## **9.2 Demand for VS Services**

### **9.2.1 Background**

According to the 1987 national contraceptive prevalence survey, only 2 percent of women having three or more children and 2 percent of women over age 30 are using VS, despite the fact that 60 percent of the women in these categories do not want more children. Interestingly, it is precisely within these two groups that two-thirds of the maternal mortality in Indonesia occurs. VS medical indications for maternal health, the need to ensure stable mother-infant relationships, and child survival indicators should meet at this point with an increase in enlightened client demand for VS services.

The data/graph in Appendix K show a significant increase in tubectomies between 1974 (7,724 cases) and 1983 (93,351). Between 1984 and 1987, tubectomies varied between 83,918 and 104,681. The data from the most recent fiscal year (April 1, 1988 to March 31, 1989) have been estimated from the figures for the first three quarters of the fiscal year and may underestimate the full year's total because of the increased activity that often occurs in the last quarter.

Vasectomies have also increased but remain a small proportion of sterilization activity. Between 1982 and 1988, the range has been between 8,144 (1984) and 18,861 (1982). In the last three fiscal years, there is noted a consistent increase -- 8,345 in 1986; 12,881 in 1987 and 13,000 in 1988 (full year projection).

### 9.2.2 Current Demand

**Tubectomy.** Approximately half of the currently performed tubectomies are pregnancy-related (puerperal) procedures. This is understandable in view of the lack of grassroots IEC which would promote interval procedures, and the fact that pregnancy brings the woman to a medical provider who is more aware of VS by virtue of the current emphasis on the training of facility providers. As stated earlier, family planning fieldworkers only now are about to be brought into the information loop.

A point of concern with pregnancy-related decisions is the associated time constraints, which might call for urgent, possibly abbreviated counseling and a more hasty than desirable decision. On the positive side, however, a pregnancy sharpens the awareness of an unwanted event, and puerperal ligations are technically easy minilap/local procedures. Careful antepartum counseling must be provided, however, to ensure informed choice and guarantee voluntarism. This will require increased IEC at the midwife and village family planning worker level.

**Vasectomy.** The total numbers of male procedures remain low. Only 20 percent (60) of approximately 290 health centers report procedures despite completed renovations and provision of equipment. The main problems appear to be the lack of trained doctors at the health centers and the lack of specific demand. Central Java is an area where vasectomy is much more prevalent. There, charismatic and enthusiastic proponents of vasectomy have propelled their programs into the community, trying various modes of service delivery which might not be appropriate in other areas of the country (eg., paramedic surgeons and client transport to city centers). These innovative activities stimulate both health personnel and the public.

### 9.2.3 Anticipated Demand

The soon-to-be launched refresher training program for 3,000 BKKBN fieldworker supervisors and 17,000 fieldworkers will include a major segment on VS. This IEC effort will encourage these grassroots level personnel to inform, motivate and advise clients of the availability of VS services and to assess their qualifications as candidates for the procedure. It is likely that this training will increase the number of interval tubectomy procedures on women. The number of vasectomies may also increase, although the magnitude is hard to predict, the initial increase will be modest, at best. Data from the first nine months of 1988, however, suggest a considerable increase in vasectomies.

Another impetus for an anticipated increase in demand is the recent change toward use of the "vasectomy without scalpel" technique, which is currently being practiced in Central Java. In an IPPA (Indonesian Planned Parenthood Association) unit, they have performed almost as

many (1,000) vasectomies in two months (December 1988-January 1989) as in all of the prior 12 months. This increase followed the introduction of the new procedure in June 1988, an accumulation of satisfied users, a newspaper article in December 1988, and the recent distribution of an attractive leaflet emphasizing a procedure "without cutting." Such a dramatic increase in demand, however, is not likely to occur in other regions even with the introduction of the non-scalpel vasectomy technique, until other factors such as committed service providers, a reservoir of satisfied users, and positive community experience with vasectomy are also present. Nonetheless, it speaks to potential demand in the future.

Considering the large pool of female and male VS candidates, the upcoming increase in local providers of information (BKKBN fieldworkers) and a potentially attractive new vasectomy technique, one can predict an increased interest on the part of many clients in VS. A doubling of VS procedures in two years is predicted by BKKBN analysis; however, this seems overly optimistic at present.

#### 9.2.4 Concerns

Female VS. More interval procedures will primarily have an impact on district hospital facilities and may require giving priority to tubectomy cases on certain operating room days. In addition, more procedures will be done by general practitioners who may need refresher minilap training in local anesthesia/sedation techniques.

The laparoscopy demand will also increase making more urgent the need for reliable repair and maintenance as well as replacement of poorly functioning telescopes, which make the procedure more hazardous. Currently, laparoscopy is viewed positively by women who are partial to general anesthesia, who prefer the small incision and are attracted by the knowledge that a highly trained expert is performing the procedure. Four hundred Ob/Gyns, however, cannot bear the brunt of the sought after rise in female VS. The 20,000 GPs and surgeons form a personnel pool which must be tapped.

Quality assurance and monitoring must be in place so that all mortalities and clusters of morbidities (infections, post-procedure pregnancies) are investigated promptly and thoroughly. Adverse events should be minimized so that the increase in demand does not decelerate.

Male VS. The "no-cut" vasectomy technique presents an opportunity to breach male restraint and must be combined with improved counseling and retraining of vasectomists. Field trials are necessary before a large scale program is mounted, and retraining would afford a needed re-emphasis on aseptic technique and autoclave usage and handling. A pilot project on paramedic training that was promptly and adequately evaluated would also be of value.

#### Recommendation

39. To maintain, enhance and ensure quality and informed choice during this period of intensified VS activity by BKKBN and PKMI, IEC, monitoring, supervision and quality assurance must be combined with a judicious selection of service sites and well-trained providers, so that clients will be encouraged to seek services.

### 9.3 Information, Education and Communication (IEC)

#### 9.3.1 Background

Phase I strategy was based on facilities and technical upgradation in order to make services more available ("facilities and trained providers enhance demand"). VS service remains an

unofficial mode of family planning even though it is carried out in Government facilities by Government professional employees and VS is suggested in some BKKBN literature as the first choice for terminators of childbearing. Basically, word of mouth has carried the news about vasectomy--mainly by satisfied users in areas where cultural acceptance is widely associated with excellence. On the tubectomy side, at least half the acceptors are motivated by a pregnancy or antenatal contact with doctors who have knowledge of the availability of VS. Given these constraints, PKMI has opted for the "individual approach" such as satisfied user clubs and individual communication within extended families. The lack of IEC effort, however, may be an important rate-limiting factor in VS.

Phase II strategy included funds for the following activities:

- A vasectomy pilot project, which trained fieldworkers to inform family planning acceptors of village health center vasectomy services provided by expert vasectomists;
- Orientation of field staff to VS, 2000 supervisors and 17,000 fieldworkers on a national level; and
- A special one-province project designed to influence informal community leaders.

### 9.3.2 Accomplishments to Date

These Phase II projects are in too early a stage to evaluate. The relative absence of IEC in Phase I may explain in part the minimal increase in demand for vasectomy during this period, which has seen the largest increase in service sites (60 active health centers). The plan to orient family planning workers as part of a more general three-day, retraining scheduled for May, 1989, is an important strategy. The lack of knowledge about VS on the part of the major resource person in family planning, however, has been a serious constraint.

IEC will continue on a "person-to-person" level because mass media efforts are precluded, due to religious sensitivity, and, hence, a sound approach in the Indonesian context.

### Recommendations

40. An evaluation of the VS orientation of fieldworkers should be carried out soon after they have completed their upcoming three-day orientation in VS.
41. The "individual" approach to providers, clients, formal, and informal leaders, should continue to be used and operations research should be done to assess the impact of the effort.

## 9.4 BKKBN-provided VS Financial Assistance (Subsidization)

### 9.4.1 Background

Although in public the Government is not yet directly involved in VS methods, it does not mean that there is no Government attention given to VS. Since 1984, BKKBN has provided a great deal of assistance directed towards the implementation of a VS program. This assistance is, in part, in the form of a subsidy in fees which is given to the service unit--namely,

Rp. 10,000. for every tubectomy case and Rp. 7,500, for every vasectomy case (this has been revised upward recently to Rp. 12,000 for either procedure).

#### 9.4.2 Provision of Assistance

This per case assistance to the service unit is provided with GOI funds. The funds provided, however, will only be enough to cover approximately 60 percent of the number of VS cases that are estimated to be requested in the 1988/89 fiscal year. Therefore, USAID has recently provided funds to BKKBN to supplement the GOI budget for this activity. The support is for the four-month period of December, 1988 to March 1989, and will provide a Rp.15,000 per case reimbursement to hospitals that provide VS services. In addition, GOI funds have been provided to BKKBN for fiscal year April, 1989 to March, 1990 to cover a total of 200,000 VS cases.

Service sites depend on the VS subsidy to maintain their operating areas, provide salaries and expendable supplies. Even though public sector clients often pay a token sum in addition to the subsidy, most service sites indicate that, to varying degrees, they bear the burden of support for VS cases. The BKKBN financial assistance is often not paid in a timely or complete fashion and less money than expected may be reimbursed because of client transport costs deducted by BKKBN. In addition, there is a local government tax on minor surgeries, which is required in some districts and not in others (recently, BKKBN has requested the provinces to discontinue this practice). These deductions often mean an additional drain on service site resources. These factors must operate as a significant disincentive in some areas. To counteract the problem there has been a recent 50 percent increase in VS financial support and the GOI has expressed the intention of continuing the increase into the next fiscal year.

#### Recommendations

42. BKKBN should continue to work towards simplifying the existing VS subsidy system and see that subsidies are promptly and regularly provided. Specific guidelines for the disbursement and use of the funds should be developed and disseminated to all implementation units.
43. In keeping with KB-Mandiri, consideration should be given to instituting a sliding scale so that clients pay according to income level and ability to pay. In all possible instances, clients should pay at least a token amount (if not more); this contributes to family planning self-sufficiency, and strengthens voluntarism. However, inability to pay should not prevent a client from obtaining VS.
44. Service units should be encouraged to provide services to the poor. Consideration should be given to increasing the subsidy level to units providing such services.
45. To ensure that the total VS subsidy is received by the unit providing services, BKKBN should work to change policies so that VS is exempted from local tax and service charges.

### 9.5 Operations Research

#### 9.5.1 Proposed Areas of Study

Medical Training. There is a need to assess the effectiveness of the current national VS medical training program. This can be accomplished by designing studies of such issues as the quality of the training; the number of doctors that complete training and are able to start delivering

VS services immediately; the time gap between training and establishing VS services; and the number of successful trainees practicing VS service delivery two years after training (or an appropriate time interval).

**Counseling Training.** There is also a need to assess the impact of the counseling training program. This is a very new activity for Indonesia (and anywhere in the world, for that matter) and as such several issues are unclear, such as the ability of trained personnel to utilize their counseling skills routinely; the impact of counseling on client decision making; the availability of a "counseling space" (i.e., quiet and adequately private); the ability of trained personnel to pass on their counseling skills to other staff; and the acceptance of the concepts of VS and family planning counseling by the authority figures--doctor, hospital director, BKKBN staff.

**Postpartum vs Interval VS Service Delivery.** Data are not yet available on the national trend towards VS service delivery at the postpartum and interval stages. However, service delivery approaches have important implications for the development of the national VS program and hence data on this issue should be available. In general, the program should be moving towards an interval approach and if this is not the case, it is necessary to know why and to take appropriate action (re-education of service providers, etc).

**General Anesthesia vs Local Anesthesia.** Again, data are not yet available on the national trend regarding type of anesthesia utilized for VS service delivery. This has very important implications for the safety and effectiveness of the national VS service delivery program and program planners and trainers should be knowledgeable in this area in order to be able to take the necessary planning and training actions.

**Laparoscopy vs Minilap Procedures.** Yet again, data are not available regarding the types and numbers of the various VS methods that are being utilized throughout Indonesia. This information has important implications as well regarding safety, planning, training, and procurement actions.

**Follow-up of Initial VS Cost Study.** The Oscobat Gani Study of VS costs determined what the hospital costs are for VS service delivery. That study, however, did not address what the client is actually paying for VS services-related activities (transport, etc.) It is especially unclear what percentage of VS acceptors pay the full costs for procedures and what percentage pay a part or none of these costs due to the receipt by the hospital of the BKKBN reimbursement or due to other reasons. This is a very important piece of the VS payment issue that needs to be addressed.

### **Recommendation**

46. It is recommended that a meeting be held on operations research to be attended by representatives of BKKBN's Central Office; PKMI's Central Office; University Research Corporation, and consultants to BKKBN in order to agree on the priorities, feasibilities and schedules for the following key topics:
  - Medical and counseling training;
  - A comparison of postpartum and interval tubectomy;
  - Laparoscopy and minilap: advantages and disadvantages; and
  - The factors influencing the choice of general (ketamine) and local anesthesia.

## 10. Recommendations

### Upgradation of Service Facilities

1. Further activity in the physical renovation of health units is not recommended except in specific instances of need based upon demonstrable demand.
2. An adequate evaluation should be made of the utilization of health center equipment so that redistribution is done when necessary.
3. Minilap and vasectomy kits and falope rings should be ordered in sufficient quantities to replace these expendable items.

### Training

4. A comprehensive training evaluation/needs assessment should be conducted as soon as possible to assess more fully and systematically the impact of past training activity, as well as the short-term and long-term needs for clinical (including refresher), counselor, and fieldworker training in the future.
5. An ongoing evaluation component should be built into all training activities conducted in the future as part of the project. Meaningful evaluation of training is difficult, but it must address such important issues as the quality and impact of training. The number of functioning teams, constraints to service delivery, future needs, gaps, quality and effectiveness of training should also be addressed.
6. Minilaparotomy with local anesthesia should be the standard for training for GPs and surgeons, as both the safest method and the one best suited to the Indonesian medical personnel situation. (Minilaparotomy will have to become the primary surgical method if BKKBN's ambitious VS prevalence goals are to be met.) Ob/Gyns should have training in both laparoscopy and minilaparotomy, and be capable of training and supervising other doctors in minilaparotomy with local anesthesia. Careful instruction in perioperative monitoring and care of the airway, as well as in cardiopulmonary resuscitation (CPR) methods should be included in all clinical training. When general anesthesia (ketamine/ketalar) must be used, one member of the surgical team should be capable of endotracheal intubation.
7. Clinical training of medical teams should be continued, linked to assessments of local utilization levels and projected demand, and supported by a sufficient training caseload.
8. There should be a continuing emphasis on the training of counselors and fieldworkers. Given the relative constraints on IEC for VS which exist and are likely to continue in Indonesia, one of the most potent forces for increasing service delivery is the referral capacity of BKKBN field staff. Concomitantly, good counseling training to ensure voluntarism and informed choice, and ultimately, client satisfaction, is both politically and programmatically sound. Refresher training will also be needed.
9. In all training, the intended permanency of VS must continue to be emphasized.

---

<sup>9</sup>Recommendations are numbered according to the order in which they have appeared throughout the report.

10. Increased support to PKMI from USAID and AVSC is highly recommended to enable paid medical personnel at the PKMI Branch level (the same individual responsible for overall monitoring and supervision of quality) to follow-up with all trainees within two to four weeks of their training to see that the trainee is performing VS procedures. If he is, surgeries can be observed; if he is not, analysis of the reasons can be made so that corrective action can be taken. Longer term follow-up should also be conducted.
11. Operations research studies or evaluation efforts are recommended to address key training issues such as the study of high-performing VS sites to determine causes for success and feasibility of replication through training. Other areas for study would be optimal trainee selection and follow-up, and the impact of counseling and clinical training on client satisfaction and quality of services.
12. Trainees should be carefully selected, taking into account individual motivation and commitment to provide family planning/VS, as well as location (i.e., high actual or potential demand in the service catchment area).
13. There may be an ongoing need to train health center *puskesmas* personnel. If so, the need should be determined by a well-considered needs assessment (See #1 above). As a policy, whatever further training of doctors at the *puskesmas* level still may be needed should be done within the first six months of the doctor's assignment to the (upgraded) *puskesmas*.
14. Conversely, another strategy to consider would be a program under which doctors from provincial or district hospitals would regularly visit selected health centers to provide vasectomy services. If any such program is instituted, it should be referred to as "assisting," or "outreach to" "satellite centers," rather than making reference to "mobile teams" (or "safaris") since these latter terms have negative connotations in a US context.

### RAM Center

15. Reactivate the RAM Center at PKMI's Central Office.
16. PKMI and BKKBN need to develop a system for government support or an alternative approach to take over the funding.

### Technical Assistance

17. PKMI should recruit one full-time staff member with adequate technical expertise to manage the supervision and monitoring systems that are essential to quality assurance of services. Consultants on medical quality assurance should be used on per diem basis to conduct supervision and investigation to the service centers.
18. Concrete long- and short-term planning for PKMI's role in providing TA to BKKBN on VS services must be made. This plan should be based realistically on PKMI's strengths and weaknesses in the past, with PKMI taking the lead rather than being formulated as a response to outside initiatives or offers.
19. Provincial PKMI offices should be encouraged and strengthened in providing TA to the provincial VS services. PKMI's central office should support this decentralization process.

## Quality Assurance

20. A special unit to deal with medical quality assurance should be established at the central level. This unit should manage and analyze all incoming medical reports. It should then provide feedback to the service providers. This unit might best be located at BKKBN Pusat and supported by epidemiologist(s) on a part- or full-time basis. Similar, smaller units should also be established in major provinces with a high number of VS acceptors. Decentralization and active involvement at the provincial level in medical quality assurance should be encouraged.
21. Reports of death and serious complications requiring hospitalization should be reported immediately (within 24 hours) to the provincial level as well as to the central level, to BKKBN (the quality assurance unit), PKMI, and, if need be, to the Ministry of Health (or they can be contacted by the BKKBN and PKMI). This would be carried out through a "hot line" channel separate from the regular reporting system. Immediate and thorough investigations of deaths should also be carried out by medical experts from the province or central level.
22. An agreed-upon standard of VS service should be enforced. Information on surgical and anesthesia procedures, as well as other factors that could indicate the quality of the services, should be carefully analyzed and followed up. Adequate measures to "enforce" quality assurance such as discussions in meetings or at an annual workshop of PKMI should be taken. Use should also be made of other channels such as POGI (the Ob/Gyn professional association) and the Indonesian Medical Association (IMA).
23. Supervision at the central and provincial levels should be strengthened. Guidelines for supervision (what to supervise, findings, recommendations, etc.) should be strictly followed. Supervision should be done regularly by capable and reputable medical experts. PKMI, BKKBN and the Department of Health should consider follow-up of supervision to be very important. Medical reporting forms should be simplified--this should be the first task of the central quality assurance unit. Feedback on these reports should be given immediately to the service centers. This could be presented through a clear and practical bulletin or newsletter format.
24. Counseling prior to and after VS procedures should be carried out conscientiously and consistently following the existing guidelines. Training for special workers (PLKB and paramedics) is important. Counseling should be supervised.

## Private Sector

25. That portion of the private sector who demonstrate a commitment to VS service should be supported in an effort to reduce the burden on the government sector;
26. Subsidization or assistance to VS procedures by the program should be maintained and increased to support service to those clients served by the private sector who are unable to pay the full cost;
27. Mechanisms such as insurance or a "credit" system should be explored in order to make it more feasible to go to the private sector for VS service.

## Reversal Center

28. It is recommended that USAID continue to fund the Raden Saleh unit as the single national reversal center. At the current rate of reversal procedure requests, the center could care for the number of reversals which would occur with the doubling of the current number of sterilizations.
29. The role of BKKBN in supporting VS services has to continue. One important area they should emphasized is in supporting the quality assurance of the VS services--both the medical and non-medical aspects.
30. BKKBN must continue to create a better environment for VS acceptance especially among religious leaders. Voluntarism, appropriate and effective IEC, and safety procedures should be strengthened by BKKBN through its support of PKMI.
31. In close collaboration with PKMI, the BKKBN Bureau of Contraceptive Service should strengthen its commitment to supervision, monitoring, and surveillance of VS services.

## PKMI

32. USAID or AVSC should support the augmentation of PKMI professional staff. This should include an additional physician at the central level who would be responsible for overall quality of VS services including counselling, monitoring, supervision and trainee follow-up.
33. Increased assistance should be made available to PKMI to support qualified clinicians (on at least a part-time basis) at certain active branches in strengthening quality assurance, trainee follow-up, counseling and regular monitoring and supervision activities.
34. A central unit for medical QA and data analysis should be established by a joint BKKBN/PKMI effort to provide timely reports, analysis and feedback to the branches. The unit should have strong support from and close links to BKKBN. It should produce a quarterly newsletter which can be a vehicle for information, education and improvement of standards. The first activity of this new unit should be the introduction of a simplified VS medical reporting form.
35. PKMI should establish a standard reporting procedure whereby VS-related mortality and serious morbidity requiring hospitalization are reported to central as well as provincial BKKBN and PKMI levels immediately (i.e., within 24 hours). BKKBN, PKMI, USAID and AVSC must all work to see that this important activity is instituted and followed. In all relevant PKMI meetings the issue of QA in general and reporting of serious problems in particular must be addressed.

## AVSC

36. USAID and AVSC should meet as soon as possible to discuss issues of mutual concern, and to agree upon an annual workplan for AVSC's activities in Indonesia. Further meetings should be held between AVSC, USAID, PKMI, and BKKBN as a follow-up to the strategy meeting of June 1988 to review and update strategies and needs for assistance for VS, and to mutually agree upon priority activities and funding sources.
37. AVSC should augment its presence in Indonesia. PKMI (as well as BKKBN and USAID) welcomes AVSC assistance which needs to be strengthened in a number of technical areas, e.g., program planning, evaluation, monitoring and supervision--to cope with the increased

activity it is being called upon to perform. If buy-in funds are available, an in-country representative should be considered; in any event, a close and regular working relationship between AVSC and PKMI should be maintained.

38. The current VS Advisor to BKKBN should continue to be funded through the same funding mechanism (a USAID buy-in to AVSC). AVSC, USAID, and A.I.D./Washington need to work to resolve any ambiguity and lack of clarity in his roles and responsibilities vis-a-vis AVSC.

### **Demand for VS Services**

39. To maintain, enhance and ensure quality and informed choice during this period of intensified VS activity by BKKBN and PKMI, IEC, monitoring, supervision and quality assurance must be combined with a judicious selection of service sites and well-trained providers, so that clients will be encouraged to seek services.

### **IEC**

40. An evaluation of the VS orientation of fieldworkers should be carried out soon after they have completed their upcoming three-day orientation in VS.
41. The "individual" approach to providers, clients, formal, and informal leaders, should continue to be used and operations research should be done to assess the impact of the effort.

### **BKKBN-provided VS Financial Assistance (Subsidization)**

42. BKKBN should continue to work towards simplifying the existing VS subsidy system and see that subsidies are promptly and regularly provided. Specific guidelines for the disbursement and use of the funds should be developed and disseminated to all implementation units.
43. In keeping with KB-Mandiri, consideration should be given to instituting a sliding scale so that clients pay according to income level and ability to pay. In all possible instances, clients should pay at least a token amount (if not more); this contributes to family planning self-sufficiency, and strengthens voluntarism. However, inability to pay should not prevent a client from obtaining VS.
44. Service units should be encouraged to provide services to the poor. Consideration should be given to increasing the subsidy level to units providing such services.
45. To ensure that the total VS subsidy is received by the unit providing services, BKKBN should work to change policies so that VS is exempted from local tax and service charges.

### **Operations Research**

46. It is recommended that a meeting be held on operations research to be attended by Representatives of BKKBN's Central Office; PKMI's Central Office; University Research Corporation, and consultants to BKKBN in order to agree on the priorities, feasibilities and schedules for the following key topics:
  - Medical and counseling training;
  - A comparison of postpartum and interval tubectomy;
  - Laparoscopy and minilap: advantages and disadvantages;
  - The factors influencing the choice of general (ketamine) and local anesthesia.

## Appendices

**Appendix A**  
**Scope of Work**

47

Appendix A

SCOPE OF WORK

- I. PROJECT: Family Planning Development and Services II, Project 497-0327 - Voluntary Sterilization.
- II. PURPOSE: The Family Planning Development and Services (FPDS) II Project with the National Family Planning Coordinating Board (BKKEN) provides support for six components: Training, Modern Management, Voluntary Sterilization, Urban, Village Family Planning, and Research. The project began in 1983 and has recently been extended until 1992. Support provided for the Voluntary Sterilization (VS) Component was for activities of the Bureau of Contraceptive Services within BKKEN; a total of US\$3,582 million was obligated for technical assistance, medical staff training and other institution building activities; medical equipment; seminars and workshops; upgrading of hospitals and health centers activities. Another \$4.3 million was obligated the end of FY 1987 to fund additional technical assistance, upgrade additional hospitals, buy equipment, set up a surveillance system, and develop a private voluntary clinic network. Specifically, the original objectives of USAID support for this component, as outlined in the FPDS II project paper, were:
1. To upgrade 173 provincial hospitals and 546 health centers to provide voluntary sterilization services in 13 priority provinces.
  2. To provide medical equipment, furniture, renovation and trained medical staff for the above centers:
  3. To support the Repair and Maintenance (RAM) center for three years and prior to turning it over to GOI for support.
  4. To provide technical assistance and other activity support from the Indonesian Association for Secure Contraception (PKMI).
- Additional objectives added with Amendments 2 and 3 of the project were:

1. To upgrade up to an additional 477 hospitals in the 14 Outer Island provinces as well as those additional hospitals required to provide good coverage in the first 13 provinces.
2. To provide medical equipment, furniture, renovation and trained medical staff for these sites.
3. To provide training and orientation concerning the VS service program to BKKBN and Department of Health.
4. To provide international and local technical assistance.
5. To establish a medical quality assurance system for all provinces to assure high quality VS services.
6. To develop a private voluntary sterilization clinic network.
7. To establish a VS Reversal Center.

The first objective of this evaluation is to gauge the extent to which the activities supported under the project have met the objectives of the project as outlined above. In addition to quantitative measures of actual activities performed, the evaluation should assess the quality of the work conducted and the degree to which the new services provided have been utilized. The second objective is to examine the development of institutional capacity to provide quality services and supervision in the provincial health structure. The third objective is to assess the contribution of the international technical assistance to improving BKKBN and PKMI's ability to manage a national voluntary sterilization service program.

Based on the findings, the evaluators should provide recommendations in three areas:

1. How to improve further the institutional capacity at BKKBN to manage voluntary sterilization services.
2. How to utilize most effectively the remaining original and new resources planned for the final years of this project.

3. What role the Bureau of Contraceptive Services could play in implementing the proposed new USAID project, "Private Sector Family Planning" planned for FY89 obligation.

III. BACKGROUND: Voluntary Sterilization (VS) is not currently an official family planning program method under the Indonesian National Family Planning Program. This is largely because of the political and cultural sensitivities that surround family planning and especially VS in Indonesia. The BKKBN has for a long time supported VS but was not able -- and still is not able -- to directly develop a VS program due to these constraints.

For this reason, VS was initially developed in Indonesia primarily by a private sector, voluntary, professional membership organization, the Indonesian Association of Secure Contraception (PKMI). However, the activities of PKMI have always been closely monitored and endorsed by BKKBN. PKMI has been working to develop VS in Indonesia since 1974, when the organization was formed. It is currently made up to 25 provincial branches with members mainly from the medical professions.

From the beginning of its work, PKMI has had various levels of support in developing a VSC program from both the Ministry of Health (DepKes) and BKKBN. Initially, various BKKBN and DepKes officials served on the PKMI Board and on committees. Also, BKKBN assisted PKMI in obtaining financial and technical support for its programs to develop VS. In the mid-seventies, BKKBN provided a VS institutional reimbursement to cover a portion of the VS service delivery costs as a pilot activity. This lasted for about three years and supplemented the various projects of PKMI. In the early 1980's, both BKKBN and DepKes officially acknowledged PKMI as the organization responsible for developing VS in Indonesia. Since 1985, BKKBN has again provided an institutional reimbursement to facilities that provide VS services. This has now become a key part of the BKKBN budget and will continue to receive BKKBN attention.

However, most importantly, in 1986, BKKBN entered into an agreement with USAID to embark on a major VS development project. This project initially focused on upgrading VS service sites and

training medical teams to ensure adequate quality of service and was implemented with considerable assistance from PKMI. This project, now in its second phase, has developed into a comprehensive VS development project, with medical training, field worker training, facility upgradation activities, quality assurance activities, counseling training, a VS reversal center, and planned IEC activities. Again, many of these activities are being implemented with the assistance of PKMI but under the full control and coordination of BKKN.

**Early VS Program Development:** During the early 1970's, PKMI concentrated on developing a strong organization and enlisting support for VS from the medical profession, especially the ob/gyn specialists. Also, a repair and maintenance unit was established to service endoscopic equipment that was needed for VS service delivery.

In 1976, PKMI began the development of an in-country medical training capacity for VS, by establishing five national VS training centers. Over the years, six additional centers were added to this training network so there are now 11 national VS training centers in Indonesia, all under the auspices of PKMI. These centers are located at top medical schools throughout the country and provide on-going training in VS for medical students as well as post-graduate training for various types of medical personnel from hospitals and health centers.

At this stage of VS development, there was some unofficial support from the national family planning program, including participation in planning VS development activities and the provision for several years (1975-1978) of a per case subsidy for health facilities that provided VS services. This allowed a limited number of VS requesters to receive VS services at a reduced cost.

During these initial stages of development, most of the financial and technical assistance for these PKMI activities was from a USAID supported cooperating agency, the Association for Voluntary Surgical Contraception (AVSC). Other AID supported cooperating agencies, such as Pathfinder and FPIA provided limited assistance at these early stages of VS development. However, JHPIEGO, another AID supported cooperating agency, did provide both substantial training opportunities in the USA for selected specialists and a significant amount of equipment at this early stage.

**Mid-Stage VS Development:** After training more than medical teams (one doctor and two paramedics), the PKMI program shifted in 1980 towards supporting service activities at the hospitals where there were trained medical teams. With AVSC assistance, PKMI undertook VS needs assessments in five provinces that determined the needs for facility development at five potential hospitals in each province. Based on this needs assessment, equipment and renovation support was provided to all the hospitals and a per case institutional reimbursement system was put in place that reimbursed the hospitals a set amount for a limited of VS cases. This allowed the hospitals to provide VS services at much reduced costs to the VS requesters. At this same time, several other AID supported cooperating agencies began to work with PKMI to support the same kind of service development activities. Altogether, by 1983, PKMI was working with over 100 hospitals in 10 provinces to develop VS services in this manner. Considerable cooperation and support for this activity was received from DepKes and BKKBN in various unofficial ways.

**Current Stage of VS Development:** In 1985, based on the success of PKMI to introduce VS in Indonesia and the apparent potential demand for VS services, BKKBN requested support directly from USAID to carry out VS service development activities as had been done by PKMI but on a larger scale. Under the project, Family Planning Development and Services II, thirteen provinces were chosen for this activity and PKMI was contracted to carry out a Needs Assessment in those provinces to determine the requirements for upgrading the health facilities to ensure high quality VS service delivery. Continuation of post-graduate training of medical teams from the field was included in this project. In effect, BKKBN was assuming some of the responsibility for VS development because of the demand from the public. This included the utilization of funds from BKKBN to again provide a BKKBN per case institutional subsidy for a limited number of VS cases.

Therefore, because of the more direct support for VS development by BKKBN after 1985, PKMI was able to concentrate on other, more complex and very important VS development areas such as counseling, medical supervision and quality assurance, improved training, and development of its organizational capabilities. The development of

a capacity for self-sufficiency also become a major goal of PKMI, since donor support was forecast to decrease substantially over the next few years.

**Summary:** In summary, based on the initial efforts of PKMI to first train VS service providers and then support VS service facilities, BKKBN and USAID agreed to carry out a much larger effort to support the development of VS on a nation-wide basis. This agreement resulted in the VS component that was included in FPDS II and implemented in 1986-87. This component is now moving into its second phase of activities, including upgrading 213 additional hospitals in all 27 provinces (230 hospitals and 290 health centers were upgraded in the first phase), continued medical team training, new training activities for field workers and BKKBN provincial staff, a counseling training effort, the development of a VS quality assurance program, and initiatives in the private medical sector.

To date, a total of over 1200 physicians/paramedical teams have been trained since the mid-1970s. Over 2000 health facilities report referring VS requesters, and over 500 hospitals report providing direct VS services (30% of all hospitals). There are over 60 hospitals throughout Indonesia that provide 100 to 299 VS cases per year, and over 40 hospitals that provide more than 300 cases a year. Demand for VS has grown steadily from less than 10,000 cases in 1974 to approximately 120,000 in 1987.

Over the last several years, the VS case load has remained constant at around 100,000, although there has been no increase in the per case VS subsidy to health facilities to keep up with the increasing costs, and there is no major information and education support for VS. BKKBN is estimating a dramatic increase in VS acceptance over the next several years, once all the health facilities that are being assisted begin to provide VS services, the field staff training is complete, and the VS per case institutional reimbursement system is improved as well as the amount of funds increase to cover more cases. The VS case load for 1988/89 is estimated by BKKBN at 140,000 cases.

**IV. STUDY STRUCTURE:** Prior to the arrival of the evaluation team, the Bureau of Contraceptive Services and PKMI will assemble and organize all relevant documents (project papers, monthly/quarterly reports, annual plans and corresponding umbrella PILs) to enable expeditious review by the team. The bureau will prepare a list of all activities, funded, by time period and institution. The Bureau will also compile a list of every program medical and counselling trainee participant. These lists will be utilized by the evaluation team to draw samples.

The team will review all the pertinent documents assembled by the Bureau. They will then select randomly a sample of USAID-supported hospitals and health posts that have been upgraded and visit those sites in order to assess the Bureau of Contraceptive Services Management System, the quality of work produced and the way the services are utilized. They will also survey a sample of trainers from various courses to learn their views on the value of the experience. The quality and usefulness of the technical assistance, both international and local including PKMI and AVSC, New York will be reviewed in terms of its contribution of the institutional development of the Bureau and to improving the quality of the voluntary sterilization program, the pilot efforts to develop a national surveillance system will be reviewed as well as efforts to establish a private clinic network. Questions which should be asked by the evaluation team include:

1. Have the goals and objectives of the project been fulfilled?
2. Was the planned process for implementing the VS component followed and was it an effective process?
3. What is the current and anticipated demand for VS services in Indonesia?
4. What are the strengths and weaknesses of the current and planned VS service and training program?
5. What are the high priority needs of the VS program?
6. What program strategies are developed and in place or are being developed to address these needs? Are these strategies appropriate? If not, what changes are necessary?

7. What institutional capabilities exist within the country to address these needs/problems/weaknesses?
8. What role does PKMI and/or other NGOs have in addressing the development needs of VS in Indonesia?
9. What local support and what external donor assistance is needed to continue the necessary VS development effort? What resources are available?

V. EVALUATION TEAM: The team will consist of four persons. The team leader will be an expert expatriate physician who is experienced in voluntary sterilization program management and development, institutional development and systems of supervision and referral. He/She should have had broad experience in the population field. A second expatriate consultant, a USDH officer, not funded under this PIO/T, will be a population program manager with experience in developing and evaluating national voluntary sterilization programs. Two local Indonesian expert consultants will be included on the team. These persons should be experienced family planners from an Indonesian university, BKKBN, or a private research institution who are familiar with the voluntary sterilization program. They should have had many years of experience in the family planning field and have attained a relevant graduate degree. All four persons selected must be able to read a substantial number of documents in English, be knowledgeable in sampling and interview techniques, and be able to write well documented reports in English. The expatriate consultants will not be expected to know Bahasa Indonesia, as the local consultants will be responsible for reviewing and synthesizing the documents, reports, etc. which are in the Indonesian language.

The team will also contract for secretarial services to prepare their draft report for presentation prior to departure. The report draft will be reviewed by BKKBN and USAID staff before the final day of the evaluation.

VI. SCHEDULE: The evaluation is expected to take three weeks or 20 working days in Indonesia. Up to five additional days will be allowed for one expatriate consultant to visit the Association for Voluntary Surgical Contraception in New York for two days to review

their involvement and for program preparation and finalization of report in the U.S. The evaluation is planned for the end of January and beginning of February, 1989, so that BKKEN and USAID can use the results of the evaluation for preparation of the new project. The following evaluation schedule is proposed:

<u>Task</u>	<u>Estimated Dates</u>
Selection of expatriate consultant and contracting by PopTech.	By late December, 1988
Selection of local consultants.	By late December, 1988
Expatriate Travel to Indonesia.	January 20, 1989
Briefing at USAID Office; introduction to BKKEN.	January 23, 1989
Document review at USAID and BKKEN and interviews with BKKEN and USAID officials.	January 23-25, 1989
Visit to provincial hospitals, selected trainees, and ongoing projects.	January 25-31, 1989
Further interviews with BKKEN; assessment of management systems.	February 1-6, 1989
Preparation of draft report.	February 7, 8, 1989
Presentation of draft report at BKKEN, receive feedback (A.M.).	February 9, 1989
Incorporate preliminary feedback into a draft report to leave for USAID/BKKEN review.	February 10, 11, 1989
Depart Indonesia.	February 12, 1989
Review written feedback from BKKEN/USAID	March 10, 1989
Submission of final report	April 30, 1989

VII. REPORTING REQUIREMENTS: on the fourth working day, the team should submit a written document to USAID and BKKBN describing its sampling methodology and plans for field visits. The evaluation team should prepare 20 copies of a first draft report for presentation to BKKBN and USAID. The report should contain: (a) a data sheet, background, and current status of the project, (b) an introduction, (c) methodology, (d) major findings, (e) conclusions and recommendations, and (f) lessons learned. The report should commence with an executive summary. This draft report should be presented in an open forum to BKKBN and to USAID in order to receive oral feedback and comments. The preliminary feedback should be incorporated as necessary in the draft and 10 copies of this revised draft should be left with USAID before the team departs.

Prior to March 10, BKKBN and USAID will provide the team leader with written comments for incorporation prior to finalization of the report. The final report should be submitted in English in 50 copies -- 30 for the BKKBN and 20 for USAID no later than the end of April, 1989. The team leader should also complete the abstract and detailed summary portions of the AID Evaluation Summary Form (to be provided by USAID).

VIII. FUNDING: Funds will be provided from Project 0327 Voluntary Sterilization component for a buy in to the AID/W Population Technical Assistant (POPTech) project. PopTech will contract with the expatriate consultant and will provide him/her with sufficient funds for the local consultants, local transportation, secretary, supplies and material. The expatriate consultant will draw up individual contracts with the consultants. (If the consultant is a GOI official, he or she will be paid according to BAPPENAS guidelines.)

The evaluators will be expected to make field visits to a sample of projects and institutions receiving funding. Where it is necessary for BKKBN staff member to accompany, funds for this travel may be taken from the Supervision and Travel line item of PIL 107.

PROPOSED CONTACTS AND SCHEDULE

Contacts:

1. Jakarta:

- BKKBN -- Chairman, Central  
Deputy for Operation Program, Central BKKBN  
Deputy for Evaluation & Research, Central BKKBN
- PKMI -- Dr. Bari, President, and  
Dr. Azrul, Board Executive Director
- NGOs -- Raden Saleh Clinic - training center and  
service provider
- AID -- Dr. Emmanuel Voulgaropoulos/Mr. John Rogosch/  
Dr. Carol E. Carpenter-Yaman
- Consultants: David Denman, PSC; Russell Vogel, AVSC

2. Field: Bali, Central Java, Bengkulu, NTB

- BKKBN -- provincial and kabupaten offices
- PKMI -- branch offices
- DepKes -- provincial offices
- Service Providers (provincial and districts)

LIST OF DOCUMENTS TO BE REVIEWED BY TEAM

1. Project Paper for Project 0327 (VS component)
2. PIL for First VS Needs Assessment
3. First Needs Assessment Report.
4. PIL No. 40/PIL No. 69
5. Field Reports from Project Monitoring.
6. RIG Audit Report of FPDS II
7. AVSC Indonesia Assessment Report (March, 1986)
8. AVSC Indonesia Equipment Evaluation
9. PIL No. 107
10. Second Needs Assessment Report

## Appendix B

### List of Training Centers

## Appendix B

### List of Training Centers

Dr. Erdjan Albar  
Director PUSDIKLITBANG  
PKMI SUMUT  
RSUP Dr. Pirngadi  
Jl. Prof. HM. Yamin SH No. 47  
Medan

Dr. Hakim Sorimuda Pohan  
Director PUSDIKLITBANG  
PKMI SUMSEL  
RSUP Palembang  
Jl. Jend. Sudirman  
Palembang

Dr. James Thouw  
Director PUSDIKLITBANG  
PKMI JABAR  
RSUP Dr. Hasan Sadikin  
Jl. Pasteur No. 38  
Bandung

Dr. Burham Warsito  
Director PUSDIKLITBANG  
PKMI D.I. Yogyakarta  
RSU Dr. Sarjito  
Jl. Kesehatan No. 1  
Surabaya  
Sekip Yogyakarta

Dr. Made Kornia Karkata  
Director PUSDIKLITBANG  
PKMI Bali  
RSUP Denpasar  
Denpasar

Dr. G.E. Wowor  
Director PUSDIKLITBANG  
PKMI SULUT  
Klinik WKBT "ESTHER"  
Lorong Gereja Pantekosta  
Jl. Salu-Sario Tumpaan  
Manado

Dr. Nawazir Bustami  
Director PUSDIKLITBANG  
PKMI SUMBAR  
RSUP Dr. M. Jamil  
Jl. Perintis Kemerdekaan  
Padang

Dr. Suryono S.I. Santoso  
Director PUSDIKLITBANG  
PKMI DKI Jakarta  
Klinik Raden Saleh  
Jl. Raden Saleh Raya No. 49  
Jakarta

Dr. Rudi Yuwana  
Director PUSDIKLITBANG  
PKMI JATENG  
RSUP Dr. Kariadi  
Jl. Dr. Sutomo No. 16  
Semarang

Dr. R. Prajitno Prabowo  
Director PUSDIKLITBANG  
PKMI JATIM  
RSUD Dr. Sutomo  
Jl. Dharmahusada No. 6 - 8

Dr. Natas Djasmadi  
Director PUSDIKLITBANG  
PKMI SULSEL  
RSU Pelamonia  
Jl. G. Tinggimae  
Ujung Pandang

**Appendix C**  
**Evaluation Team Itinerary**

## Appendix C

### Evaluation Team Itinerary

- Feb. 23 AM Meeting at USAID with John Rogosh, Russ Vogel.  
PM Initial review of Scope of Work and Project Documents.
- Feb. 24 AM Meeting at BKKBN with Dr. Peter Sumbung, Drs. Sutedjo, Dr. Abdullah Cholid and staff, including David Denman.  
PM Meeting at PKMI with Dr. Azrul Azwar and staff.  
PM Review of Scope of Work with John Rogosch.
- Feb. 25 AM-PM Preparation of Team Agenda and Responsibilities.
- Feb. 26 AM-PM Review of Documents.  
Informal discussion with John Rogosch.
- Feb. 27 AM Travel to Semarang, visits to BKKBN Provincial Office and Dr. Kariadi Hospital (VS Training Center).  
PM Visit to Indonesian Planned Parenthood (PKBI) Chapter (Vasectomies Observed).
- Feb. 28 AM Visit to BKKBN Provincial Office and Department of Obstetrics and Gynecology at the Medical School of Gajah Mada University at Dr. Sardjito Hospital.  
PM VS site visit to Boyolali District Hospital.  
PM VS site visit MUSUK Health Center.  
Return to Jakarta.
- Mar. 1 AM VS site visit Clinic Raden Saleh.  
PM Team Preparation of VS Questionnaire.
- Mar. 2 AM Review of Documents at AID/Jakarta.  
PM Visit with DEPKES Officials; Opening Ceremonies of PKMI Annual Meeting.
- Mar. 3 AM Attendance at PKMI meeting (BA; FL).  
Interview (AM; BA) with Dr. Wahyu Hadisputra and Dr. Suryono Santoso re activities of VS Reversal Center at Clinic Raden Saleh.  
PM Flight to Bali. Distributed questionnaire to PKMI Officials.
- Mar. 4 AM Day Off (AM; RJ).  
Attendance at PKMI National Meeting (BA; FL).  
Collected questionnaires from PKMI Officials.
- Mar. 5 AM Visit to Puskesmas Tegallabang in company of Dr. Inne Susanti. Interview of Puskesmas physician.
- Mar. 6 AM Travel to Surabaya (AM; FL).  
PM Visit to Dr. Lila Dewata, Prof. Ob/Gyn Airlangga School of Medicine, Surabaya.

	AM	Travel to Ujung Pandang (RJ; BA).
	PM	Visit Provincial BKKBN and PKMI Office.
Mar. 7	AM	Team Conference.
	PM	Interview with David Denman, BKKBN Consultant.
Mar. 8	AM	Data Analysis.
		Interview with Dr. Does Sampurno, Board member of PKMI, former President of PKMI, Representative of Pathfinder Fund.
	PM	Data review with Russ Vogel.
Mar. 9	AM-PM	Writing of Report.
Mar. 10	AM	Team Conference.
	PM	Writing of Report.
Mar. 11	AM	Review of First Draft by Team.
	PM	Collation of Amendments.
Mar. 12	AM	Writing of Second Draft.
Mar. 13	AM-PM	Review of Report.
		Presentation of major recommendations to BKKBN officials from Central Office and 24 Provinces - Puncak.
Mar. 14	AM	Preparation of report.
	PM	Interview with Paul Richardson.
Mar. 15	AM	Preparation of Oral Presentation.
	PM	Presentation of Recommendation to USAID/Indonesia Representatives.
Mar. 16	AM-PM	Review of Team Evaluation with BKKBN and USAID Official at Puncak.
Mar. 17	AM	Preparation of Evaluation in Final Form.
	PM	RJ - leaves Jakarta.
Mar. 18	AM-PM	Preparation of Evaluation in Final Form.
Mar. 19		Day off.
Mar. 20		Closing of temporary office at AID/Jakarta (AM and FL).

## **Appendix D**

### **List of Persons Interviewed**

## Appendix D

### List of Persons Interviewed

#### USAID/Jakarta

Dr. Emmanuel Voulgaropoulos  
John Rogosch  
Carol Carpenter-Yaman

Chief, Office of Population and Health  
Deputy Chief, Office of Population and Health  
Population Officer

#### BKKBN

Dr. Haryono Suyono  
Dr. Peter Sumbung  
Dr. Sutedjo Moeljodihardjo  
Dr. Abdullah Cholil  
Dr. Agus Rukanda  
Dr. Emmy Salman  
Dr. Rhina Azrul Azwar  
David C. Denman  
Russell Vogel  
Drs. Sardin Palbadja  
Dr. Rohani  
Dr. Sugiri Syarief

Chairman  
Vice Chairman  
Deputy for Operation  
Deputy for Planning  
Chief, Bureau of Contraceptive Services  
Sub-Bureau Chief for Hospital Services  
Sub-Bureau Chief for Medica Technology  
Consultant to BKKBN for Family Planning  
Consultant to BKKBN for the VSC Project  
Head, BKKBN Central Java  
BKKBN Yogyakarta  
Chief, Sub-Division of Quality Control, Bureau of  
Contraceptive Services, BKKBN  
Bali Provincial Office and PKMI Branch  
Chairman of East Java Province

Dr. Inne Susanti  
Dr. Sahala Panjaitan

#### PKMI

Dr. Abdul Bari Saifuddin  
Dr. H. Azrul Azwar MPH.  
Dr. Suryono S.I. Santoso  
Dr. Moch. Anwar  
Dr. R. Soeraryo Darsono  
Dr. H. Prastowo Mardjikoen  
Dr. Rudi Yuwana  
Dr. Lila Dewata  
Dr. Agus Sopacua  
Dr. Does Sampurno

President  
Executive Director  
Honorary Treasurer; Director Klinik Raden Saleh  
Chairman, PKMI Central Java Branch  
Director, Training Center PKMI, Central Java  
Board member of PKMI

#### OTHERS

Dr. Paul Richardson

University Research Corporation (URC)

## **Appendix E**

### **List of Documents Studied**

## Appendix E

### List of Documents Studied

#### USAID

1. USAID VSC Strategy (Eng)
2. USAID O/PH Strategic Plan (Eng) - 1987
3. USAID Audit of VSC Project - 1988
4. Project Paper Indonesia Family Planning Development and Services II -  
Project 497-0327 PILS No:  
40 - 06 November 1985  
69 - 30 December 1985  
107 - 20 November 1987  
107A - 01 July 1988  
107C - 03 January 1989

#### BKKBN

1. BKKBN Policy on Kontap (Eng)
2. The Field Operational Family Planning Program - The Indonesian Experience (Eng)
3. Personal Written Communication - David Denman

#### PKMI

1. Latest Progress Report from Beginning of Project (Indo)
2. First Needs Assessment Report (Indo) - Pil #40
3. Second Needs Assessment Report (Indo)
4. The Development of Reimbursement Mechanism and Cost Analysis of VSC (English)
5. The Development of VSC Program in Indonesia (Eng)
6. Conclusions of PKMI Annual Conference - 1987 (Eng)
7. Number of VSC Cases from 1974 to Present
8. Initial Tables from VSC Private Sector Study (Indo)

9. The Conclusion of the National VSC Strategy Meeting (Eng)
10. Report on The First Phase of the Referral, Screening and Follow Up Project (Eng)
11. 10 + Published Manuals and Other Material
12. Personal Written Communications - Russ Vogel
13. Personal Written Communication - David Denman

#### OTHERS

1. Analysis of reimbursement mechanism and cost analysis of voluntary surgical contraception, University Research Corporation - Oct. 1988.
2. Improving the acceptance and quality of VS services through screening referral and follow-up of pre- and post-VS clients, University Research Corporation - Sept. 1988.
3. The conclusions of the National VSC strategy meeting, Puncak - June 1988 - PKMI.
4. National Contraceptive Prevalence Survey, Indonesia, Central Bureau of Statistics, National Family Planning Coordinating Board, Indonesia Institute for Resource Development, Westinghouse.
5. Personal Written Communications-Nicholas Wright, 1989.
6. Comprehensive Assessment of The Indonesian Association for secure contraception (PKMI), 1988 - Gomez, F., Saunders L; Stewart G. - AVSC.
7. Follow-up Survey of Sterilized Women, Talogo, HR et al. Dept. Public Health and Preventive Medicine University of Indonesia, 1985.
8. Ketamine - Its Pharmacology and Therapeutic Uses. White, PF et al., Anesthesiology 56:119, 1982.
9. Maternal Mortality in Indonesia and Egypt. Fortney, J. et al., International OBGYN, 1988.
10. Safe and Voluntary Surgical Contraception. Guidelines for Service Programs World Fed. Adv. VSC, 1988.
11. Strategic Plan, Office Population/Health AID Jakarta, 1987.
12. The Indonesian Family Planning Program: Government Influence and Client Choice, Warwick DP, POP and DEV - Review, Sept. 1986.

13. The Development of Family Planning Programs within Indonesian Islamic Organizations -- A Fifteen Year History, D. Sampoerno et al., presented at APHA, Nov. 1988.
14. Report on the Evaluation of Medical Equipment Procured by AVSC for the Hospital and Health Center VSC upgradation project, AVSC, Oct. 1988.
15. Comprehensive Assessment of the Indonesian Association for Secure Contraception, AVSC, June 1988.

## **Appendix F**

### **Questionnaire: Evaluation of VS Program**

**Appendix F**

**Questionnaire:  
Evaluation of VS Program**

1. Place of work:

Hospital: .....  
Province: .....

2. Your Job Title and Description: .....

3. Your Position in PKMI: .....

I. FACILITY:

A VSC support project was developed 2 years ago in several provinces. This project goal was to upgrade (renovate) VS service facilities.

1. Have VSC Service facilities in your province been renovated as per the first need assessment?

..... have been renovated  
..... not yet  
..... do not know

2. If they have been renovated, what do you think of the renovation in terms of quality and the process?

..... good  
..... not good  
..... do not know

3. Please give your comments and suggestions about the renovation: .....

4. Has the renovation caused an increase of VS services in:

Your Hospital

Your Province

..... yes  
..... no  
..... do not know

..... yes  
..... no  
..... do not know

II. EQUIPMENT:

1. What equipment do you have in your hospital:

Laparoscope : ..... piece  
Minilap Kit : ..... piece  
Vasectomy Kit : ..... piece

2. Are these quantities sufficient?

..... yes  
..... no  
..... do not know

If no, how many more are needed?

Laparoscope : ..... piece  
Minilap Kit : ..... piece  
Vasectomy Kit : ..... piece

3. How many laparoscopes are broken? ..... piece

4. What percentage of the laparoscopes are used for VS? .....%

5. Do you have comments and suggestions about the equipment?  
.....

III. TRAINING:

1. How many people have been trained in VS at your facility?

	<u>Vasectomy</u>	<u>Tubectomy</u>
Doctor	.....	.....
Paramedic	.....	.....

2. Only for these from the provinces with Training Centers:  
Give the number of physicians that have been trained and the technique trained (may give an estimation or percentage).

	<u>Minilap</u>	<u>Laparoscopy</u>
Ob-Gyn Doctors (Including resident)	.....	.....
General Practitioner	.....	.....

3. One of the problems mentioned in the training is the turn-over of doctors after training.

Therefore recruitment of trainees is important. Do you have any suggestions regarding the selection and recruitment of trainees? .....

IV. SERVICES

1. What is the ratio between tubectomy and vasectomy done in your hospital in 1988:  
.....

2. For tubectomy, what is the percentage of laparoscopy and minilap:

Laparoscopy : ..... %  
Minilap : ..... %

3. What is the percentage of post pregnancy and interval:

Post pregnancy : ..... %  
Interval : ..... %

4. What is the percentage of general anesthesia and local anesthesia:

General anesthesia : ..... %  
Local anesthesia : ..... %

5. What anesthesia drug is used for:

General anesthesia : .....  
Local anesthesia : .....

6. For VS national program, what type of anesthesia do you suggest:

.....  
What is your reason?.....

7. How much fee is charged to the VS client in your hospital?

Tubectomy: Rp. ....  
Vasectomy: Rp. ....

8. How much do you think the real cost paid by the hospital for VS service?

Tubectomy: Rp. ....  
Vasectomy: Rp. ....

9. How much do you think in realistic the fee can be paid by the VS client in your place:

Tubectomy: Rp. ....

Vasectomy: Rp. ....

10. What is the average daily income of common families in your area?

Rp. .... (estimation).

11. Do you have any suggestions and comments regarding VS services?

.....

V. COUNSELLING

1. Who is providing VS counselling in your place?

..... No one

..... Doctor

..... Paramedics

..... Others

2. What is your opinion regarding the counselling? (problem, implementation and others)

.....

VI. REVERSAL

1. Did you have request for recanalization (reversal) in your place?

Yes / No

How many: .....

2. Was it fulfilled?

Yes / No

Explain how and why:.....

VII. QUALITY ASSURANCE

One of the problems currently being focussed in VS service is the quality assurance. Could you give suggestion how this Quality Assurance could be improved? (Reporting, Supervision, Monitoring, etc.).....

VIII. CLOSING

We thank you for your help to fill in this questionnaire. As closing point, to increase the VS service, could you rank the following problems based on its severity (1 - 5):

- ..... Inability for client to pay
- ..... Lack of IEC
- ..... Religious constraint
- ..... Afraid of operation
- ..... Others specify:

**Appendix G**  
**Equipment Purchases**

## Appendix G

### Equipment Purchases

**Phase I:** PIL 40, dated 6 November 1985, provided Rp. 768,198,000 for local purchase of equipment to support directly VSC procedures at 240 Type C Hospitals (Tubectomy/Vasectomy) and 290 Health Centers (Vasectomy). Rp. 360,650,000 was used for locally obtained medical equipment, kerosene autoclaves (172) and oxygen systems (210). Rp. 475,480,000 was dedicated to appropriate furnishings (benches, desks, chairs, beds, cabinets) to be obtained locally at the provincial level. In addition, PIL #619 from project 0270 dated 30 December 1985, supported local equipment purchase at Rp. 54,000,000 for one year. Completion and delivery of these materials occurred by August 1987 under Phase I.

**Phase II:** Based on Phase I experience, equipment needs were evaluated by PKMI's second needs assessment begun in December 1987, and completed in August 1988, funded under PIL #107 dated November 20, 1987. Upgradation under Phase II began January 1988. A total of Rp. 900,000,000 have been designated for local purchase of equipment at 215 hospitals in all 27 provinces (161 in the initial 13 province area and 54 in the outer provinces.)

**Appendix H**

**Project Implementation Letters**  
**(Training)**

## Appendix H

### Project Implementation Letters (Training)

The training activities to be carried out were defined in PIL #69, of predecessor project #497-0270, and PILs #40 and #107 of Project #497-0327. PIL #69 supported the first year of the three-year clinical training program, and PIL #107 the subsequent 2 years. A needs assessment conducted previously (under PIL 46-80 of Project #497-0270) indicated requirements for training 538 doctors and 1076 paramedics.

PIL #69 (December 30, 1985) provided for training of 160 doctors and 320 paramedics from 13 priority provinces to be completed by December 31, 1986. A total of Rp. 406,306,000 or \$362,127, whichever was less, was committed by this PIL. Slightly less than Rp. 300,000,000 of this total was for specific training-related activities, as follows:

- 1) Funding of 9 PKMI-associated VSC regional training centers to train 160 medical teams (1 doctor/2 paramedics per team). Rp. 233,522,000.
- 2) Formation of a National VSC Training Steering Committee composed of BKKBN, DepKes and PKMI to establish training policies. Rp. 22,657,000.
- 3) Supervision and follow-up of trainees by regional training centers. Rp. 24,096,400.

(Rp. 107,100,000 was committed for upgrading 18 community health centers to allow training of teams in vasectomy. While it was envisaged that 260 health center doctors (and 520 paramedics) would require training, this component did not contribute to training per se. Thus, of the total of Rp. 406,306,000, slightly less than Rp. 300,000,000 was for training, including Rp. 18,930,600 which constituted a contingency fund.)

PIL #40 (of Project #0327) of November 6, 1985, did not have funds committed for training, rather it referred to the training activities of PIL #69 (of Project #0270) as outlined above.

PIL #107 (of November 20, 1987) committed Rp. 624,720,000 for additional training of medical teams to be conducted at the (by then) 10 regional medical centers. (There are now 11 of these regional (national) training centers at Indonesian university medical centers.) The target number of trained teams was unspecified, because the Phase II needs assessment had not yet been completed, although training was to emphasize vasectomy, and to train medical teams each month.

PIL #107 also committed (or earmarked) additional funds for other types of training activities. Rp. 434,054,000 was committed for support of PKMI counseling training for health facility personnel. Rp. 195,000,000 was earmarked for BKKBN management and field staff orientation and training to support the provision of VS services. Rp. 63,150,000 was committed for orientation training by field staff about vasectomy.

**Appendix I**  
**Training Activities**

**Appendix I  
Training Activities**

<u>TRAINING ACTIVITY</u>	<u>PERIOD</u>	<u>GOALS</u>	<u>ACCOMPLISHMENTS</u>
1. <u>COUNSELING</u> AVSC	1985 - 1987	312 +60 Trainers	312 +60 Trainers
BKKBN	1988 - 1989	1060 (Hospital: 480 H.Center: 580)	1060 (Hospital: 480 H.Center: 580)
2. <u>MEDICAL TEAM</u> AVSC	1976 - 1986	665 Teams	
FPLA/PATHFINDER	1976 - 1986	70 Teams	
BKKBN/PKMI	1986 - 1987	487 Teams (Hospital: 69 H.Center:218)	252 Teams (Hospital: 181 H.Center: 71)
	1988 - 1989 (July 1989)	311 Teams (Hospital: 75 H.Center: 236)	156 Teams (Hospital: H.Center:)
UNFPA	1988 -1989	75 Teams	70 Teams
3. <u>FIELD STAFF</u> (PIL#107)			
Vasectomy Field Workers	Dec. 88- Jan. 89	240 Workers	Recently completed
Referral Training (8 Provinces)	Dec. 88- Jan. 89		
Management Orientation (BKKBN/DEPKES)	Recently scheduled Apr.-Jun. 89	2019	No report as yet
Community Leaders (1 Province)	Dec. 88	148	Completed Jan 89
4. <u>OTHER FIELD STAFF</u> URC: (4 Provinces)			
Referral	Mar. 89	515	Follow-up screening underway
BKKBN FIELD STAFF	Apr.-Jun. 89	20,000 (17,000 FW; 3,000 FW)	No report as yet

## **Appendix J**

### **Deaths Related to VS Procedures**

**Appendix J**

**Deaths Related to VS Procedures**

**Summary of VSC Deaths - 1988**

<u>CASE #</u>	<u>#1</u>	<u>#2</u>	<u>#3</u>	<u>#4</u>
AGE	39	27	35	33
PARITY	8	3	4	5
HOSPITAL AND PROVINCE	RSU E. KALIMANTAN	RSU E. JAVA	RSU E. JAVA	ARMY C. JAVA
DATE OF OPERATION	16-02-88	17-02-88	12-11-88	29-06-88
DATE OF DEATH	19-02-88	17-02-88	18-11-88	29-06-88
ANESTHESIA	KETAMINE	KETAMINE	KETAMINE	KETAMINE
ANESTHESIA	PARAMEDIC	MD	GP	PARAMEDIC
SURGEON	GP	OB-GYN	OB-GYN	RESIDENT
VSC TECHNIQUE	MINILAP	LAPARO- SCOPE	LAPARO- SCOPE	MINILAP
CAUSE OF DEATH	BOWEL INJURY	HEMOR- RHAGE	BOWEL INJURY	HEMOR- RHAGE

Mortality Report Registered at Central PKMI 1984/1987

<u>No.</u> <u>CAUSE OF DEATH</u>	<u>1984</u>	<u>1985</u>	<u>1986</u>
1. Sepsis + Anemia (Probably due to Bowel perforation)	-	1	-
2. Peritonitis due to gut perforation	1	-	-
3. Intra-abdominal bleeding + Pulmonary emboli + Anaphylactic shock	-	1	-
4. Cardiogenic shock (Probably related to intra-abd.bleeding)	1	-	1
	<hr/>		
TOTAL	2	2	1

25

**Appendix K**  
**Number of Sterilizations**

**Appendix K**  
**Number of Sterilizations**

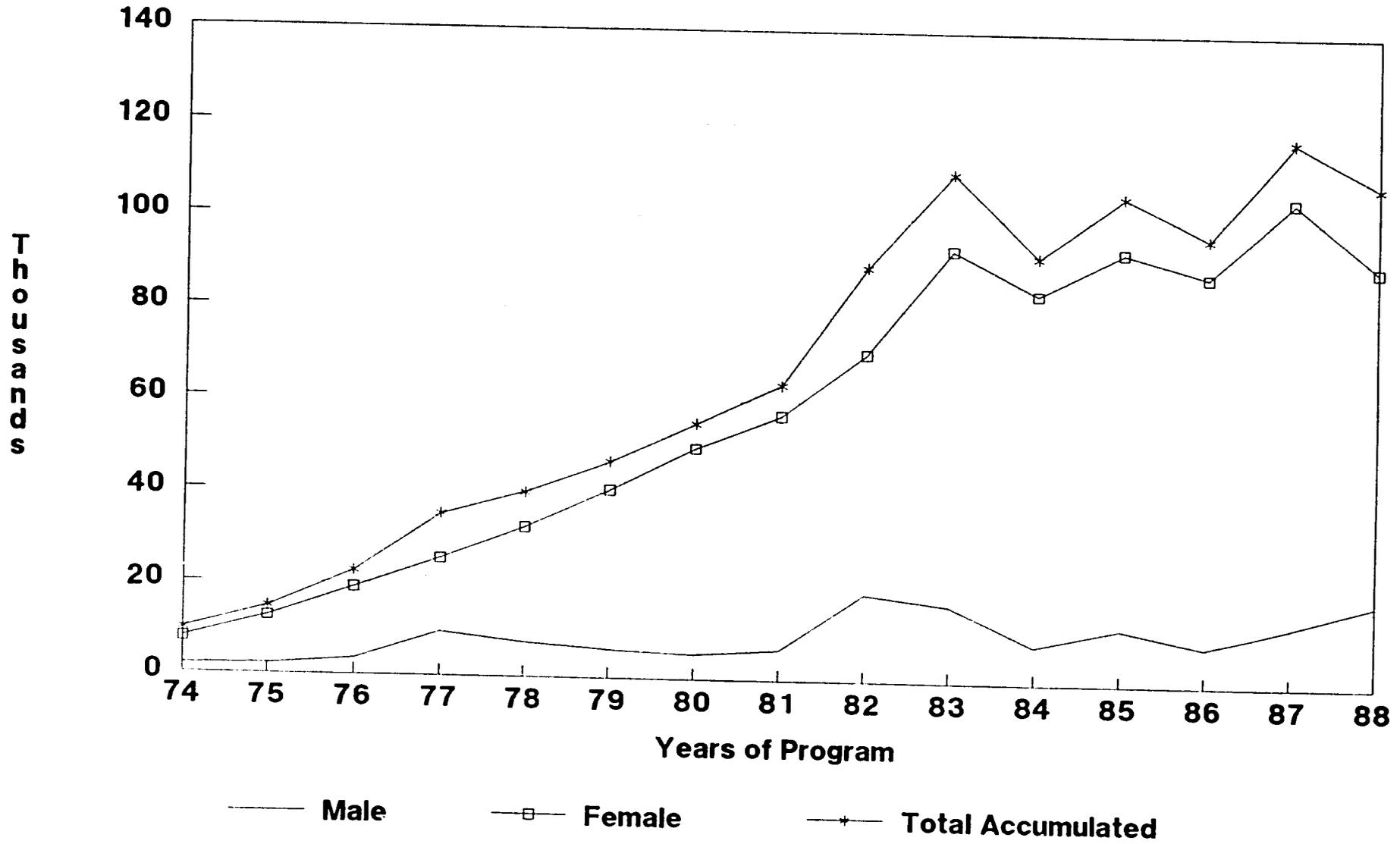
<u>YEAR*</u>	<u>MALE</u>	<u>FEMALE</u>	<u>GRAND TOTAL</u>
1974	1,959	7,724	9,683
1975	2,115	12,619	14,734
1976	3,487	19,020	22,507
1977	9,556	25,462	35,018
1978	7,444	32,425	39,869
1979	6,045	40,635	46,680
1980	5,306	49,839	55,145
1981	6,446	57,015	63,641
1982	18,861	70,595	89,456
1983	16,602	93,351	109,953
1984	8,144	83,918	92,062
1985	12,050	93,287	105,337
1986	8,345	88,128	96,473
1987	12,881	104,681	117,562
1988**	18,000	90,000	108,000

\* *This is a fiscal year, e.g., April 1974 through March 1975.*

\*\* *Complete 1988 figures are not yet available. Figures given reflect activity only through January 1989. Actual total figure is expected to be at least 119,000.*

27'

# Number of Sterilizations 1974-1988



8/17

## **Appendix L**

**Results of the Survey of PKMI Provincial Officials  
at their Annual Meeting, March 7-10, 1989**

## Appendix L

### Results of the Survey of PKMI Provincial Officials at their Annual Meeting March 7 - 10, 1989

1. 33 questionnaires were returned out of 52 distributed. These 33 questionnaires covered 24 provinces out of 26 PKMI branches. Questionnaires from the same province tend to be similarly filled in.

Aceh	1	East Java	2
North Sumatera	1	Bali	3
West Sumatera	2	West Kalimantan	1
South Sumatera	2	South Kalimantan	1
Riau	1	Central Kalimantan	1
Jambi	1	East Kalimantan	1
Bengkulu	2	North Sulawesi	1
Lampung	1	Central Sulawesi	1
West Java	1	Southeast Sulawesi	1
DKI Jakarta	2	South Sulawesi	1
Central Java	2	West Nusa Tenggara	2
Sulawesi Tengah	1	Irian Jaya	1
Yogyakarta	1		

2. Place of work of respondents:

Provincial Hospital	28
Regency Hospital	-
Maternity Hospital/Clinic	2
Non-Hospital	3

3. Position in PKMI Branch:

Chairman	17
Vice Chairman	1
Secretary	7
Treasurer	3
Training Center Director	3
Member	2

- I. FACILITIES: (For analysis, all questionnaires were grouped by provinces.)

- |                           |   |
|---------------------------|---|
| 1. 18 provinces mentioned | the facilities in their provinces have been renovated |
| 5 provinces mentioned     | not yet   |
| 1 mentioned               | do not know   |

Comment: Apparently some could not differentiate between first-phase and second-phase renovation.

2. From the renovated provinces:  
12 mentioned the renovation is good  
5 mentioned no good  
1 mentioned do not know
  
3. Comments and suggestions on the renovation from all questionnaires:  
5 mentioned location is not appropriate  
4 mentioned supervision not good  
2 mentioned it was not done seriously  
2 mentioned it was a small cost renovation  
2 mentioned it was not good  
1 mentioned it was good  
1 mentioned it was just okay  
1 suggested it should not be opened to competitive bid
  
4. 12 respondents mentioned there is an increase in VS services in their hospital after the renovation  
4 respondents mentioned no increase  
4 respondents mentioned do not know  
15 respondents mentioned there is an increase in VS services in their province  
4 respondents mentioned no increase  
4 respondents mentioned they do not know  
10 respondents did not give answer

Comment: The latter represent provinces not yet upgraded.

## II. EQUIPMENT:

1. Out of 24 provinces responding to the questionnaires, 23 were filled in by PKMI officials working at a Provincial Hospital. Out of these 23 hospitals, only 3 do not have a laparoscope, 4 do not have minilap kits and 5 do not have vasectomy kits. The number of laparoscopes in each hospital range from 1 - 3 with a mode of 2. Minilap kits range between 1 to 10, with a mode of 2 to 3, while vasectomy kit ranges between 1 - 12, with mode 2 and 3. Total laparoscopes mentioned in all hospitals are 42, minilap kits, 57 and vasectomy kits, 53.
  
2. 9 hospitals (39%) mentioned they have enough equipment while 14 (61%) mentioned they do not have enough. Out of those who mentioned not enough, 10 (71%) mentioned they still need a laparoscope. The additional number of laparoscopes they needed ranges between 1 to 4, mostly 1 - 2. Also 10 (71%) mentioned they still need minilap kit ranges between 1 - 20, but mostly 1 - 2 pieces. For vasectomy kits, 9 (64%) mentioned they still need more. The number ranges between 1 - 20, mostly 1 - 3 pieces.
  
3. 7 provincial hospitals mentioned they have broken laparoscopes. The number that are broken in each hospital is 1, except 1 hospital has 2.

4. The percentage of utilization of the laparoscope for VS is very wide. The range is between 0 - 100%. Details of these are:

99 - 100% (5)	1 - 2% (1)	5 (38%) mentioned 99 - 100%
90% (3)	0% (1)	12 (75%) mentioned more than 50%
80% (2)		
50% (2)		
25% (1)		
10% (1)		
5% (1)		

Thus 12 (75%) of provincial hospitals did laparoscopies more than half the time; while 5 (38%) used the laparoscope exclusively for VS in women.

5. Comment and suggestion on equipment:

11 (48%) mentioned they need repair and maintenance, 2 (8%) mentioned they need laparocator KLI with no CO2 gas, 1 (4%) mentioned they need Cidex, 2 (8%) mentioned they never used laprocator.

### III. TRAINING:

1. The numbers of doctors and paramedics who received training in each hospital varied widely. The numbers of doctors trained in tubectomy range between 1 to 200, with an average of 15 - 20 individuals; for vasectomy, the range was between 1 to 40 with an average of 10 individuals. The numbers of paramedics trained in tubectomy and vasectomy is almost equal, ranging between 2 to 70 with an average of 20 individuals.
2. Among doctors trained, more OB-GYNs than GPs were trained in use of the laparoscope. While in minilap, the numbers of both were about the same.
3. Suggestions and comments regarding the high turnover of doctors after training:
  - The largest number, 33% mentioned that selection should be based on commitment and activity of the trainees.
  - 28% mentioned that trainees should stay at their posts for at least 2 years after the training.
  - 10% mentioned it should be discussed with the provincial Ministry of Health Office.
  - 10% mentioned it should be female doctors who are less mobile.

- 10% mentioned recruitment should be done by PKMI.
- 10% mentioned it should be newly posted doctors.

#### IV. SERVICE DELIVERY

1. Fees charged to the VS client varied. For tubectomy, charges range from 0 to Rp. 50.000 and for vasectomy range from 0 - Rp.40,000. On average, for tubectomy Rp. 15,000 and vasectomy Rp.7,500.
2. Real cost burden to hospital for VS, for tubectomy ranged between Rp.2,500 to Rp.75,000, averaging Rp.40,000, while for vasectomy, it ranged between Rp.2,500 to Rp.20,000, averaging Rp.10,000.
3. Fees which realistically can be charged to the client, for tubectomy range from 0 to Rp.35,000 with the average Rp.15,000, while for vasectomy, they ranged from 0 - Rp.25,000 with the average Rp.7,000.
4. Average daily income of families in the respective provinces ranged between Rp.1,000 to Rp.5,000 with the average Rp.3,000.
5. Suggestions and comments on VS service:

17% mentioned	tubectomy should be provided in Health Centers
17% mentioned	it should be a free service.
13% mentioned	it should be supported more by BKKBN/Depkes.
9% mentioned	it should be separated from the general hospital services.
9% mentioned	there is a need for mobile teams.
4% mentioned	PKMI should have its own VS clinic.

#### V. COUNSELLING:

1. Most hospitals mentioned counselling was given by paramedics (21 hospitals), others by doctor and paramedics (7 hospitals) and by doctor only (1 hospital).
2. Opinion on how counselling is being implemented:
  - 33.3% mentioned counselling was done well.
  - 10% mentioned it needs push from above.
  - 10% mentioned special persons should be trained.
  - 10% mentioned it took too much time.
  - 5% mentioned did not give opinion.

#### VI. REVERSAL:

1.
  - 9 (39%) hospitals mentioned they had received request for reversal.
  - 7 (30%) mentioned no request.

The rest did not answer.

2. Six of the requests were fulfilled and 3 not.  
The reasons it was not done: no facility and no budget.

VII. QUALITY ASSURANCE

1. Suggestions to improve Quality Assurance:  
Out of all responsive questionnaires, the largest group (39%) mentioned strengthening supervision and monitoring. 13% mentioned that reports should be made honestly. 9% mentioned there should be refresher training once a year. The rest did not give their comments.

VIII. The biggest problems in VS service mentioned by all questionnaires:

	MOST IMPORTANT		-----	LEAST IMPORTANT	
	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>
Inability to pay	8	5	5	10	1
Lack of IEC	2	10	9	5	3
Religious Constraint	11	6	4	6	2
Afraid of Operation	5	9	10	4	1

Other significant constraints

Husband does not agree	6
Family does not agree	2
No transportation cost	2

Summary:

The ranking of constraints is as follows:

- 1). Religion
- 2). Afraid of operation
- 3). Inability to pay
- 4). Lack of IEC

## **Appendix M**

### **Voluntary Sterilization Component Commitments under FPDS II**

**Appendix M**

**Voluntary Sterilization Component Commitments Under FPDS II  
Project 497 - 9327**

<u>COMMITMENT DOCUMENTATION</u>	<u>GRANT FUNDS</u>	<u>TOTALS</u>
<b>TECHNICAL ASSISTANCE</b>		
PIO/T 40341 Clinical Serv. Adv	\$ 263,761.00	
PIO/T 50051 CS ADV 8 mos*	\$ 94,787.00	
PIOT/T 50077 CS ADV 16 mos*	\$ 180,833.00	
Sub-Total		\$ 539,381.00
<b>COMMODITIES</b>		
PIOC 40347 Emblems*	\$ 255.00	
PIOT 30289 AVSC-MED EQUIP*	\$1,296,100.00	
PIOC 70066 MED KITS & LAPROCATOR	\$ 404,295.00	
PIOT 70072 AVSC-Med Equip	\$ 563,318.00	
PIL 72 HCC OXYSYS & AUTOCL*	\$ 282,928.00	
Sub-Total		\$2,546,896.00
<b>BKKBN OPERATIONS</b>		
PIL 46 FY 85/86*	\$1,095,446.00	
(Incl: Renovation & Local Equip 530 Hos & HP, TA, Med Tng, IEC)		
PIL 107 FY 87/90	\$2,564,241.00	
(Incl: Ren Equip 213 Hosp, Med Tng, TA, IEC, Staff Tng, Follow-up Super)		
PIL 133 VS Reimbursement	\$ 374,704.00	
PIL 107 D Amendment	\$ 500,000.00	
TRAVEL AUTH 29 persons	\$ 70,798.00	
Sub-Total		\$4,578,189.00
<b>EVALUATION</b>		
PIOT 70103 DUAL & ASSOCS	\$ 47,159.00	
Sub-Total		\$ 47,159.00
<b>UNEARMARKED</b>		
(Ext CS Adv 1 yr, Mini Computer	\$ 170,375.00	
Sub-Total		\$ 170,375.00
<b>TOTAL VOLUNTARY STERILIZATION COMPONENT</b>		<b>\$7,882,000.00</b>

*NOTES: \* Completed Activities  
Data as of 1/1/89*

- 96 -