

THE ROLE OF DEPO PROVERA
IN
THE INDONESIAN FAMILY PLANNING PROGRAM

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A thesis submitted for the degree of
Masters of Arts *Sub-Thesis*
at the Australian National University.

December 1985



DECLARATION

Except where otherwise indicated
this thesis is my own work.



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December 1985

ACKNOWLEDGEMENTS

I wish to express my appreciation to many individuals and institutions especially the National Family Planning Coordinating Board of Indonesia, the Development Studies Centre of Australian National University, and the United Nation Fund for Population Activities who made possible both the opportunity to study in Australia as well as the completion of this thesis.

Many thanks go to all who provided the invaluable assistance, guidance and support, especially to Mrs. Christine McMurray, Mrs. Lulu Bost, Mr. Rodney Cole and Mrs. Carol Mehkek.

My special gratitude is to my family (Mudji Margono, Asherrita Margono, Brian Margono and my beloved Father and Mother in Jl. Padang and Jepara), for their constant source of love, patience, understanding and moral support while I was away from home.

My intellectual dept is to Dr Terence H. Hull, my supervisor.

My deepest gratitude to my God who always meets all my needs.

ABSTRACT

The purposes of this study are to examine the acceptability of Depo Provera (DP) as a possible alternative contraceptive in Indonesia; to investigate the side effects commonly experienced by Indonesian women and to examine how they tolerate these side effects.

The analysis is based on three sources: the results of a field work case study in Jakarta, Bandung and Yogyakarta of 1985; the contraceptive continuation module of the family planning modular survey of 1982; and family planning service statistics reports.

Since the decision of the US Food and Drug Administration (FDA) not to grant approval for the use of DP as a contraceptive in the United States, in 1978, debates and controversy have been going on up to the time of writing. This decision made thousands of women afraid of getting cancer or fearful that DP will impair their fertility. Because of this controversy, the usage of DP as a contraceptive is being carefully monitored by IPPF and WHO through multinational comparative studies in 15 developed and developing countries around the world. Evidence is mounting from world wide experience, that DP is a satisfactory contraceptive with several advantages and some disadvantages but no more serious side effects than those found in oral contraceptives.

The field study demonstrated the acceptability of DP among respondents. The greatest obstacle to use was the cost of the drug. Most respondents postponed their follow-up injections for that reason, but still they did not drop-out. They used other methods to avoid pregnancy during their period without DP. These respondents would gladly have another injection when they had money to pay for the service (and the drug). The selection of DP by respondents was mostly through self evaluation, comparasion and consideration (most of the respondents have used one or another methods in the past), and the decision appeared to

be a solid decision, not just "follow the leader". The respondents also indicated that they could tolerate the side effects. It appeared that they easily managed menstrual disturbances, while most respondents were happy about the most common side effect, amenorrhoea, because it allowed them to avoid the "monthly trouble" caused by menstruation in disrupting their daily religious activities. They also benefited through avoiding anaemia, and some respondents preferred DP for post-partum use, because it does not suppress breast milk production.

In summary, the study found DP to be an acceptable form of contraception. It is perceived by Indonesian women and practitioners as a safe and reliable alternative to existing birth control techniques.

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CHAPTER 1

THE BACKGROUND OF THE STUDY

1.1 Introduction

At the beginning of the Indonesian Family Planning Program (1970), the majority of new acceptors, 55%, used intrauterine devices (IUDs) 7% of new acceptors used contraceptive pills and the rest, 18%, were using condoms. As the availability and distribution of pills through the Community Based Program improved, especially at the village level through Village Contraception Distribution Centers (VCDCs), pills became the most popular choice in the country. In 1979/1980, the first year of the Second Five Year Plan (Pelita II), new acceptors totalled 2,229,791. The main choice was pills 69.5%, followed by the IUD, 17.8%, and condoms 7.6% [NFPCB, 1985: 163].

It is generally accepted that the use of contraceptive pills requires high motivation, self discipline and regularity to gain full protection from pregnancy. In Indonesia, as in many developing countries, failure rates are substantial. For example, a 1976 survey in the Philippines reported 8 pregnancies per 100 women years during the first year of pill use, and 9.2 pregnancies per 100 during the second year [Laing and Alcantara, 1980: 119]. In East Java, from 14 to 21 per cent of users become pregnant during the first year of pill use [Sullivan et al., 1976: 190]. A major problem is irregular pill taking. Most Indonesian women, especially in the rural areas, are uneducated. They are not accustomed to taking pills to a regular schedule and may not understand that skipping a pill or two can reduce the contraceptive effect. Similarly, rural and uneducated condom users may have difficulty becoming accustomed to "a new habit" when having intercourse. For these reasons since 1976 the Indonesian Family Planning Program has made serious studies of "injectable" contraception [NFPCB, 1976: 11].

Following the good results of clinical trials, injectable contraception, especially Depo Provera (DP), has been offered by the Indonesian Family Planning Program since 1982 [NFPCB, 1985: 203].

1.2 Objectives of the Study

The objectives of this study are to examine the acceptability of DP as a possible alternative contraceptive in Indonesia; to evaluate the effectiveness of this contraception; and finally, to examine the side effects commonly suffered by Indonesian women and how they tolerate DP.

DP has been selected for study for several reasons:

Firstly, although "the method of choice" in Indonesia is pills, as mentioned above, pills have some weaknesses for rural, uneducated women. This study tries to show that DP has some advantages and is one of the possible alternative methods for fertility regulation which could replace the pill, or at least could be used as a back up method in the Program.

Secondly, DP is simple to administer, (one shot for three months), highly effective and reversible. The way of administering this drug has advantages for the new candidate, who has previously refused to use any contraception because it avoids genital exposure to medical personnel, the chore of swallowing pills every night, and the need to become accustomed to "new habits", especially before intercourse.

Abortion is prohibited by Indonesian law and sterilization is not available in the Program as it is still on clinical trial [Widjanarko, 1984: 69]. Furthermore, injections have long been popular as medical treatment in Indonesia, so the injectable contraceptive should gain popularity very soon, and win important support for the Program.

Thirdly, as in other developing countries, most babies especially in rural areas, depend upon their mother's milk. The contraceptive method now popular in Indonesia, the pill, unfortunately suppresses breast milk. On the contrary, DP prolongs the duration of lactation, and adds to the quantity of breast milk or at least does not suppress lactation [Agoestina, 1976: 1-7]. The quality of breast milk is not altered; the growth and weight gain of the infant is not impaired

[Vorherr, 1973: 1011; Koetsawang, et al., 1982: 321-331]. Furthermore, most Indonesian women have tolerated well the side effects of DP, such as amenorrhoea, irregular menses, weight gain, and lost of hair.

Java and Bali (see figure 1-1) were selected as the areas for consideration because, Firstly, since its inception in 1970 the National Family Planning Program (NFPCB) has concentrated on the densely populated islands of Java and Bali. These two islands get first priority due to their urgent population situation [Poedjo Rahardjo, 1984: 3]. Secondly, Java and Bali consist of 6 provinces, considered as leading areas in Indonesia, which make the important decisions in almost all Indonesian development programmes. In the Indonesian Family Planning Program these two islands are viewed as "wilayah penentu" (the areas that hold the final decisions) for the success or failure of the Program. This is because 64% of the Indonesian population live in Java and Bali [BPS, 1983: 2], and 73% of family planning acceptors come from these islands [Poedjo Rahardjo, 1984: 20].

1.3 The Indonesian Family Planning Program

1.3.1 The Population

As in other developing countries, Indonesia is facing the problem of population explosion. In the population censuses of 1961, 1971 and 1980, Indonesia's population was respectively 97 million, 119.2 million and 147.5 million [NFPCB, 1982: ix], and ranks the fifth largest population in the world after China, India, USSR and USA.

A large population size of about 147.5 million in 1980 coupled with a population growth rate of 2.3 per cent between 1971 and 1980 [BPS, 1983: 7] adds more than the present population of Singapore each year to Indonesia. If the trend continues, and it is unlikely to stop for at least another generation, it is possible that Indonesia could move from No 5 to No 3 in ranking in the world, because USSR and USA have growth rates far below 2 per cent per year [Samekto, 1984: 1].

Although the land area of Indonesia is still quite vast, the maldistribution of Indonesia's large population is a cause for concern. Over 60 per cent of the population live on the islands of Java and

Madura, which comprise only about seven per cent of the total land area. As a result, Java has a high density rate of 667 people per square kilometer, while out side Java and Bali, the rate is only about 46 people pr square kilometer [NFPCB, 1981: 3].

In addition, a high porpotion (45 per cent) of the population are under 15 years of age and added to the 2.5 per cent from the older age groups (above 64 years old) make up a high proportion of those who are economically unproductive.

While movement from a lower to a higher social status (vertical mobility) is rare and movement from one area to another areas has been rapid, thus, giving rise to acute problems of urbanization [Samekto, 1984: 1]. The population of Indonesia could also be discribed in terms of qualitative characteristics, as having a low of general education, low health and nutrional standards, low income per capita, a high unemployment rate and still being an agricultural society [NFPCB, 1981: 4]. Whit those attributes in view, the Government and the public became aware of the necessity of implementing an aggressive Family Planning Program, which has been in operation officially since 1970.

1.3.2 The Development of the Program

Small scale efforts in family planning in Indonesia, which provided the ground work for the National Family Planning Program, began several decades ago. The Indonesian Planned Parenthood Association (IPPA) began propagating family planning and offered family planning services in the 1950s. The "old order" top leadership did not give much thought to family planning [Hull, et al., 1967: 3; Ryder, 1971: 128]. The situation changed drastically when the "new order" leadership took office in 1966. President Suharto was one of the national leaders who signed the Declaration on Population. The government established the National Family Planning Institute (LKBN) in 1968, which had a semi-governmental status. Two years later in 1970, family planning gained a more solid status as a fully government sponsored National Program with the newly established National Family Planning Coordinating Board (NFPCB) functioning as national coordinator [Yudono, 1979: 8; Sumbung, et al., 1981: 3-4].

As a first step the program was implemented on Java and Bali, the two most densely populated islands, which carried the majority of Indonesia's population. The program at that time was aimed at recruiting family planning acceptors through provision of family planning information/motivation and contraceptive services. Considering the good results achieved in Java-Bali during the first Five Year Development Plan (FYDP) 1970-1974, in 1974/1975 the NFPCB started to expand program implementation to include ten additional provinces outside Java-Bali. The program gained a strong foothold as an integral part of the total national development program. The target expanded not only in terms of number of acceptors but also in terms of the efficiency of the contraceptives being used i e. the quality of acceptance. Follow up motivation and counselling were provided to reinforce and improve the quality of acceptance, so that a significant impact on the overall development effort could reasonably be expected. Considering the satisfactory results in Java-Bali and in the Outer Island provinces, the government decided to further expand program implementation, so that all 27 provinces were covered in the third FYDP [Yudono, 1979: 2-3; Mubramsyah and Slamet, 1980: 3-4].

1.3.3 The Objectives of the Program

The National Family Planning Program has a quantitative as well as qualitative objective. Originally its quantitative aim was stated as a 50 per cent fertility decline of the level in 1971 to be attained in the year 2000. Setting this target was intended to inject a sense of purpose and time, and some competitive spirit among program administrators and workers in the field, thereby intensifying program implementation. Based on the results and progress of the program, the target has been reset to attainment of 50 per cent fertility decline by the year 1990. Obviously, this ten year acceleration poses a tremendous challenge to the Program. The qualitative goal of the Program is institutionalization of the "Happy and Prosperous Small Family" norms in the community at large. With families having only a few children, it was thought these would be a greater likelihood that live will get better, happier and more

prosperous, socially as well as economically. It is in the light of this normative goal that "beyond family planning" activities are being implemented in conjunction with family planning motivation and contraceptive service activities.

1.3.4 The Implementation Strategy

With 27 provinces in Indonesia, all geographically and culturally distinct, the NFPCB had to set priorities for implementing its program.

First, geographic strategy was set, concentrated primarily in the islands of Java and Bali, followed by ten other Provinces, Outer islands I and then Outer islands II [Yudono, 1973; Mubramsyah and Slamet, 1980: 1-10], as shown in Figures 1-1 and 1-2.

The second strategy was the clinic based service delivery approach, which could utilize the existing national clinical facilities of the Ministry of Health, the Armed Forces, and the Private sector. The integrated service delivery approach was chosen as the most efficient approach for initial expansion of the program since it required little infrastructural development, since it used existing facilities and personnel.

The third strategy was the community based service delivery approach, for more effectiveness in improving services. These village-based units consist of fieldworkers and "Village Contraceptive Distribution Centers" (VCDCs), where follow up pills and condoms are distributed.

Because it was found that program achievements varied greatly from place to place or from province to province. Program managers decided to categorize the various program areas into several achievement oriented groupings based on the percentage of current (active) users from family planning eligible couples. These were called segmentation areas and were defined as: Phase I areas: where the percentage of current users was less than 15. Program efforts in these areas stressed the extension of services. Phase II areas: where the percentage of current users was between 15-35. In this places it was assumed that social and community dynamics in support of family planning program had

already emerged. In these areas attention is given to sustainance of achievements. Phase III areas: where the percentage of current users was beyond 35. Dynamic social and community leadership in organized family planning works was becoming more solid and FP activities were better integrated with efforts in other fields. Program officials were instructed to pay attention to the institutionalization of the small family norm.

Phase IV areas: where the percentage of current users was 55-75. In these areas, social and community dynamics in support of FP were spread fairly evenly over the sub-villages. Family planning groups which formerly laid emphasis on social activities were beginning to involve themselves in economic activities.

Phase V areas: areas where the percentage of current users was beyond 75. At this very advanced program stage, performance of economic activities by community groups was assumed to be widespread. There was also a tendency for many couples in these areas to become self sufficient in fulfilling their contraceptive needs.

In addition to these two types segmentation, the total program was divided into different program phases. The operational scheme also involved "time priority" or "time segmentation". This meant the scheduling of work by periods to ensure timely attainment of the annual target. About 40-60 per cent of the total new acceptors target was to be completed during the First Periods which extended from April through to August each year, (the fiscal year is April 1 to March 31 next year). The remaining portion, 60-100 per cent of the target, was to be completed by the end of the Second Periods (September - December). The three closing months of the fiscal year (January - March) were basically reserved for consolidating these new acceptors. In other words, this remaining time was meant for quality control.

The fifth priority was called "target segmentation". This working concept was developed during the 1982 Rakernas (Annual National Family Planning Working Conference), and comprised the Panca Karya Strategy (Five Points Strategy) and the Catur Bhava Utama (Four Key Support Pillars Strategy). The five points in the Panca Karya Strategy were as follows:

1. Encourage and help couples with wives aged below 30 or with less than three children, to have a total of no more than two children.
2. Encourage and help fertile couples with wives aged 30 or over, or with three or more children, not to have any more children.
3. Guide the young generation towards a solid understanding of the "Happy and Prosperous Small Family" norm as the appropriate and responsible way of life, and help them get more actively involved in social activities.
4. Intensify physical institutionalization of the family planning dissemination process, so that collective performance of family planning activities by community groups was increasingly becoming an integral part of their day to day activity.
5. Strengthen the mental and spiritual aspects of the family planning institutionalization, mainly the psychological aspects, so that family planning acceptors enjoy a sense of mental confidence and emotional security.

Catur Bhava Utama mentioned four key program support pillars: man, money, facilities and method [NFPCB, 1984: 10-14].

The sixth, and last, priority was called "Total mobilization". This was the operational priority or "recruitment of new acceptors by total actions", which mobilize all relevant social as well as material resources into a concerted family planning campaign. It was applied for the first time in West Java province with the name "Safary Spiral" (safary, to boost IUD acceptance). The purpose of the family planning Safary campaign was mainly to add impetus to this rather slow growing program, to enable the West Java program to catch up with its colleagues in other Java and Bali provinces. This operational pattern is now being applied widely in many parts of the country and is popularly known as "SAFARY SMILE".

Regionally, the NFPCB has offices in all 27 provinces in Indonesia and its administrative infrastructure now extends to all regencies in the country through its regency level offices. At the Sub-Regency administrative level, family planning services are administratively integrated with other sectoral programs. At the village level the NFPCB

employs field workers who are responsible for supervising all integrated service delivery in the villages. The village infrastructure consists of village contraceptive distribution centers staffed by volunteers, which are operated by 180,000 community acceptors groups [NFPCB, 1981: 2].

1.3.5 The Main Components of the Indonesian Family Planning Program.

The family planning program is carried out by private as well as government units. Thus, as a coordinating body, the NFPCB mobilizes available manpower from other institutions for the benefit of the program. For instance, medical and paramedical personnel, and clinical facilities and equipment from the Department of Health and Armed Forces Implementing Units are all utilized. Also, information officials, information mobile units and radio broadcasting, under the Department of Information, are used. As the Department of Health and Department of Information, the Government apparatus under the Department of Home Affairs is used as a fundamental key to the success of the Program. Other implementing units in close cooperation are the Department of Education and Culture, the Department of Religious Affairs, the Indonesian Planned Parenthood Association, the Muhammadiyah (Moslem Association), the Indonesian Council of Churches and the Women's Organization.

1.3.6 Information, Education and Communication

The Indonesian Information, Education and Communication (IEC) activities aim to encourage the public to understand and follow the family planning program. The indicated purpose is family and community welfare through the acceptance of the "Small, Happy and Prosperous Family" norm. The approaches taken in the last decade include mass information, group meetings, and individual face to face communication. IEC activities follow three different forms, all of which are target oriented. Those directed to the masses use the mass media, with the

community at large as its target. Those aimed at the group level involve meetings with pre-selected targets. The third form is face to face encounters, where field workers, family planning motivators, and village contraceptive distribution center personnel (volunteers) go from door to door to contact individuals.

Mass media channels include radio and television, film, news papers, family planning information mobile units, traditional media, various publications, billboards, lightboxes, video cassette recorders and so on. These are funded both by the government and various sponsoring agents abroad such as the World Bank, UNFPA, USAID.

Finally, there is the more intimate and private approach of face to face meetings through door to door family visits by Family Planning Field Workers, and visits with community leaders in the villages. This face to face approach is meant to stimulate the formation of local acceptor groups.

1.3.7 Contraceptive Services

Contraceptive services are intended to help establish new family planning behaviour by upgrading the quality of services, by increasing the number of contraceptive methods available and by enlarging the number of service sites with simple procedures and effective and inexpensive contraceptive devices. The Program offers contraceptive services at multiple sites through:

- (a) clinical services in hospitals, family planning clinics, mobile medical teams, and
- (b) non-clinical services by family planning field workers, private doctors, private midwives, village contraceptive distribution centers (VCDCs), and commercial channels. The contraceptive devices available are primarily pills, IUDs, condoms, injectables and also other methods. However, in an effort to bring family planning services closer to the people, the NFPCB extended its service delivery infrastructure down to the village level through its mobile medical teams and the community based family planning program. Now the NFPCB possesses a service delivery infrastructure that extends from the health centers to

60,000 villages in the country. The NFPCB has manpower at the village level consisting of village contraceptive distribution centers (VCDCs) in each village staffed by volunteers and managed by village organized acceptor groups. NFPCB fieldworkers, one for every three villages, supervise the VCDCs and the district health centre.

1.3.8 Acceptance and continuation

The Program began in 1969/1970, and after the first two years the numbers recruited reached over one million. They doubled by 1975/1976 to about two million, and have exceeded that level in each subsequent year, as annual achievements have essentially met or exceeded the target set.

The current Program policy is to encourage acceptors to try the IUD, as a means of reducing the heavy costs and logistical complications of pill distribution. IUD acceptance has indeed risen in recent years. The other methods, vaginal tablets, injection, and medical operations or sterilization (still on clinical trials) have always played a minor role, but the latter two, injection and medical operation, have grown to account for about 25 per cent of all acceptors.

As a result of rising acceptance rates and continuation rates, the prevalence of contraception use rose rapidly. By 1983/1984 over 66 per cent of couples in Java and Bali were using a method, with East Java province approaching 71 per cent. In Outer Islands I, where the Program did not begin until the mid 1970's, prevalence was 51 per cent by 1983/1984, with North Sulawesi the highest at 64 per cent. Outer Islands II, brought into the program in 1979/1980, had 24 per cent prevalence in 1983/1984, with Bengkulu province at 49 per cent. Altogether, by 1983/1984 Indonesia had a countrywide prevalence of 59 per cent, and according to monthly statistical summary on March 1985, the prevalence was 62.6 [NFPCB, 1985: 1].

1.4 The Data Set and their limitations

This study is based on three sets of data. The first source is the results of a fieldwork case study in Jakarta, Bandung and Yogyakarta.

This study, conducted by the author in January - February 1985, was of DP users who were still protected by DP at the time of interview. It focused on the acceptability, the motivation in usage, the side effects that commonly affected users and the tolerance shown by users to the side effects mentioned.

This field study did not cover trends in usage of DP, the causes of termination in depth, continuation rates, method failure or the background of the users.

The second source is the Family Planning Modular Survey of six provinces of Java-Bali. These surveys, conducted in 1982-1983, consisted of 4 modules:

1. The socio-economic and migration module.
2. The contraceptive prevalence and fertility module.
3. The mortality, morbidity, nutrition and health practice module.
4. The contraceptive continuation module.

Each module is designed to be self contained, and consisted of three categories of data: (1) background data on the respondents, (2) prime data, which bear directly upon the core variables investigated in the specific module, and (3) supporting data, complementing the core data and increasing their accuracy.

For this study, module 4, the contraceptive continuation module, was used. Module 4 drew its sample from the population of family planning acceptors between April 1977 and March 1982. A total sample of approximately 2400 acceptors was selected for each province. [NFPCB, 1982: 1-20].

The Family Planning modular surveys were made in 1982, but used respondents (acceptors) recorded in clinics between April 1977 and March 1982. At that time DP users were mostly from short term trial projects, offered in some clinics in big cities in Java and Bali. Those services did not reach the rural people, and the stocks of the drug were very limited. DP users comprised only about 13 per cent of the total sample. That is why the acceptability, which can be seen from the continuation rates, was relatively low compared to IUDs and pills. In other studies the continuation rates were comparable with pills and IUDs, and even better [Baldwin, 1982: 7; Barten, 1973: 2]. Furthermore, as these surveys were designed for all methods of contraception, the questions

asked about causes of termination were too general, and did not apply to the specific characteristics of DP as a contraceptive.

The third source is the Indonesian Family Planning service statistics. The service statistics publish trends in new acceptors and contraceptive current users, and prevalence levels. From these sources the trend of current users can be observed and the level of prevalence for every year and every province. The popularity and increasing availability of DP can be measured from rising use every year since the trial project period (1976).

Since the service statistics are based on the monthly reports from family planning clinics, they do not cover private services. (private doctors, private midwives and commercial channels), but these are more important for measuring DP use.

Current user prevalence rates are calculated by applying assumptions to logistic data on numbers of new acceptors or numbers of contraceptives distributed. For IUDs and injectables, acceptance involves a single event, so the recorded numbers of new acceptors should be reliable. But for pills and condoms, an acceptor may receive supplies for one month, but she/he may not use them or may waste or misuse them. As they are open to error, numbers of pills and condoms distributed may be higher than actual numbers used [Streatfield, 1984: 1-9].

1.5 Organisation of the Thesis

This thesis is divided into five chapters. The second chapter is a review of DP as an injectable contraceptive. Chapter Three looks at in the Program, and how and why the Indonesian Family Planning Program launched DP as a supplementary method. This chapter is based on The Family Planning Modular surveys and monthly Family Planning service statistics. The fourth chapter look at the acceptability of DP to Indonesian women. This chapter covers the results of field work among DP users in Jakarta, Bandung and Yogyakarta. Three main variables will be described: the acceptability, the motivation for using DP, the side effects included the tolerance of the side effects mentioned. From these results the popularity of this contraceptive can be observed and the

future situation can be predicted. The last part consists of a summary and conclusion.

Figure 1-1: JAVA AND BALI.

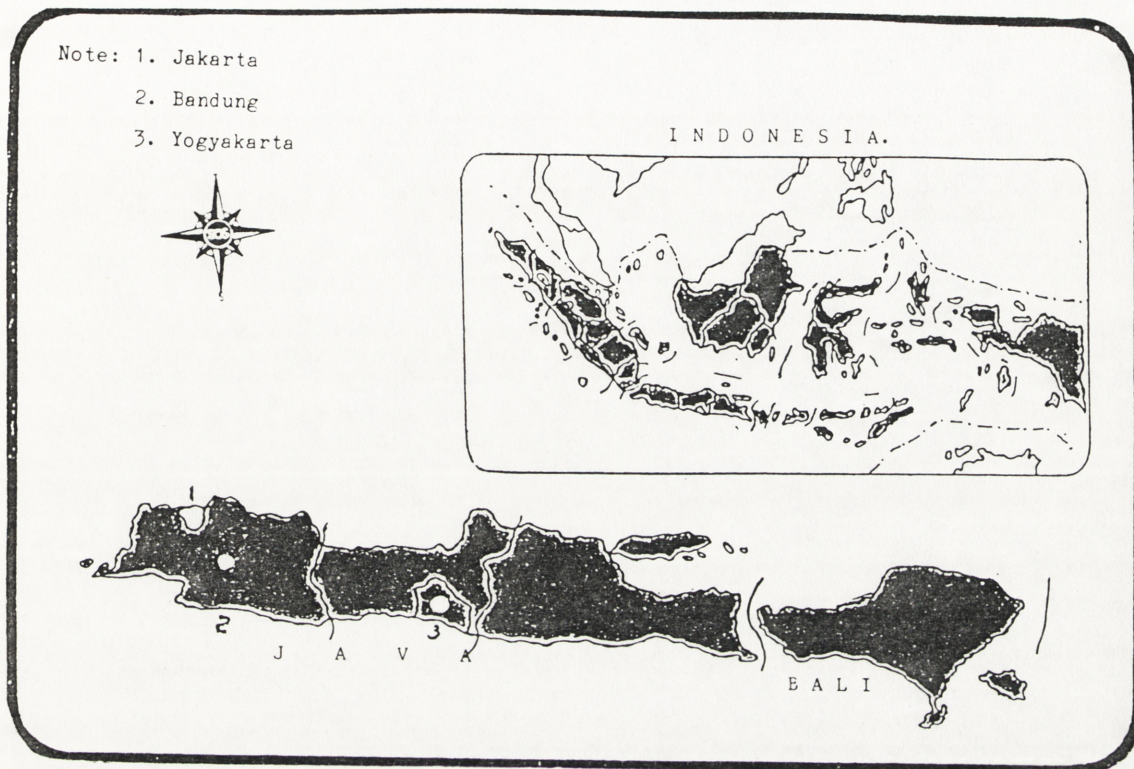


Figure 1-2: Indonesia's Provinces Comprising The Java-Bali, Outer Island I And Outer Island II.



CHAPTER 2

INJECTABLES AS CONTRACEPTIVES:

A LITERATURE REVIEW

2.1 Introduction

The goal of contraceptive research is to develop an effective, long acting method that does not require action daily, or at each act of coitus, and is reversible. Sterilization provides long term protection against pregnancy but is not reversible, while IUDs provide long term protection and are reversible, but are not suitable for all women [Liskin, 1982: B-113]. Female hormones offer another possibility for reversible, long-acting protection against pregnancy, but the search for a long-acting hormonal method free from any serious side-effects has proved difficult [Powell and Seymour, 1971: 36].

The development of progestagens (synthetic compounds with the effects of the natural hormone progesterone) grew out of the post World War II competition among drug companies to create synthetic hormones for a variety of therapeutic purposes. These early progestagens metabolized quickly and therefore had to be administered frequently to gain their effect [Rinehart, 1975: K-2].

In 1950, Dr Gregory Pincus and his associates started to utilize progestagens for fertility control, concentrating on developing an oral contraceptive [Rinehart, 1975: K-2]. The first injectable progestins were developed in 1953 by Karl Junkmann. In 1957 Junkmann, of Schering A.G. in Berlin, synthesized long-acting injectable esters of the progestin norethindrone (norethisterone) including norethindrone enanthate (NET EN) [Liskin, 1982: K-5].

The first efforts to use DP as a contraceptive were those of Dr. Coutinho from Brazil. In the early 1950s and 1960s he found that the effective dose for one month's contraception was in the range of 50 mg.

One hundred and sixty mg of DP gave protection for 3 months, at 400 mg the effect was extended to 6 months and at 1 gram for 9-12 months. DP could also be used as a male contraceptive but higher doses were required for effective suppression of spermatogenesis [Coutinho, 1978: 78, 402].

In the clinical trials of DP as a human contraceptive (1963), a standard regimen of 150 mg every three months was established. Later, the regimen of 300 or 400 mg every six months was also studied and marketed but not widely used [Mackay, et al., 1971: 148-163]. Combinations of a progestagen and an estrogen are distributed in a few countries as monthly injectables. In Chile, Recalcine Laboratories produce AGURIA, and Selesia Laboratories produce UNAMELS. Both are a combination of Dehydroxyprogesterone aceptophenide and estradiol enanthate [Rinehart, 1975: K-2; Koetsawang, et al., 1978: 63]. Another widely tested monthly injectable, Cyclo-Provera, provides complete contraceptive protection and relatively good menstrual cycle control [Topozada, 1977: 340]. The regimen currently used involves 25 mg of estradiol injected every 28 days [Fotherby, et al., 1982: 261]. In the last few years a long-lasting new injectable, Progestagen ORG-2154, was also tested. Using a 200 mg injection, ovulation was inhibited for five to ten months [Coutinho, et al., 1982: 551].

Norigest is recommended for administration using 200 mg. at every 8 weeks for the first six months and then every 12 weeks [Howard, et al., 1982: 340; Goebelmann, et al., 1979: 295]. Several combinations were distributed in a few countries as a monthly injectable. A combination of algestone acetophenide and estradiol enanthate were marketed in Mexico and Argentina under the brand name PERLUTAL and in Spain under the brand name TOPASEL [Rinehart, 1975: K-2].

Since this study focuses on DP, the discussion will be centered only on that type of injectable, particularly on the standard regimen of 150 mg every three months.

2.1.1 The Depo Provera Debate

In February 1967, the Upjohn Company submitted to the FDA (US Food and Drug Administration) a supplemental new drug application (NDA) for the new use of DP as a contraceptive in USA. Approval was given for use in a limited patient population as an injectable, and for a post-marketing study to clarify the carcinogenic potential of the drug [Kennedy, 1978: 304]. On March 7, 1978, the FDA issued a non-approval letter for DP as a contraceptive for use in USA. This decision began a debate and controversy which is on-going at the time of writing.

The supporters of DP are primarily family planning advocates and program administrators, including the IPPF (International Planned Parenthood Federation), WHO (World Health Organization), scientists, doctors and the Upjohn Company. The opposition to DP includes the FDA, the National Women's Health Network, an alliance of US consumer health and women's groups, a San Francisco based group which criticized US development policies in the Third World, the magazine Mother Jones, the magazine Women and Health, and Public Advocate, a coalition of minority and civil rights organizations [Gold and Wilson, 1981: 37]. The controversy is described in detail in Appendix A and B.

The debate heated again in 1980, and another debate arose between women groups, represented by Mr. Stephen Minkin (a Health Policy Analyst with the National Women's Health Network, USA) and several scientists and Medical researchers. The opposition groups have concentrated on using the popular media to generate opposition to DP through charges of a double standard of medical care for rich and poor women, developed and less developed nations. For these reasons, and because of US drug laws, USAID was not allowed to purchase and distribute DP abroad, [DP Debate, 1978: 203].

The FDA decision has had four main effects on service providers around the world:

a. The decision provided ammunition for those who still condemn family planning as immoral, making them slow to authorize the drug. For example, although there was long experience of DP use in Sri Lanka, only a few thousand women have access to the method. Most women who do not use DP, are afraid of getting cancer or that DP will impair their health [Potts, 1978: 233; Sai, 1978: 7].

b. The decision has inhibited Program acceptance. For example, in Indonesia DP is only made available to older women with many children, or with at least two children [Potts, 1978: 234].

c. The decision means USAID cannot supply DP and this slows expansion of use, [Sai, 1978: 7].

d. The publicity arising in the USA from the FDA decision was distorted in other countries. Governments in developing countries used those decisions as a reason for simply banning the drug [Sai, 1978: 7; Potts, 1978: 234].

2.2 The Usage of Injectables as Contraceptives outside Indonesia.

Injectable contraceptives are now legally permitted in many countries, and by far the most widely used and best known is DP [Maine, 1978: 342; Kane, 1983: 72]. The decade-long controversy centres on the safety of DP as a contraceptive, but the facts show that, while not approved in the USA, it is approved for use in more than 80 countries, including more than 10 countries in Western Europe [Potts, 1984: 10].

In its 1978 decision, the FDA noted that benefit-risk considerations are not the same in all countries of the world. In an economically developed nation like the USA, with an advanced health care system, the disapproval judgement is appropriate. The opposite decision may be more appropriate, however, for nations with higher birth rates, lower physician-patient ratios, and less readily available contraceptive methods [Gold, 1981: 36].

Thus, the debate continues, but the use increases [Rinehart, 1975: K-1; Maine, 1978: 1; Gold, 1981: 35-37]. The countries which approved DP as a contraceptive are shown in Table 2-1.

Table 2-1: Countries in which depo medroxyprogesterone acetate is marketed as a contraceptive.

Africa	Asia and the Pacific	Europe	Latin America	Middle East
Cameroon	Bangladesh	Belgium	Argentina	Bahrain
Ethiopia	Burma	Denmark	Antigua	Cyprus
Ghana	Hong Kong	England	Barbados	Iraq
Guyana	Malaysia	France	Bolivia	Kuwait
Kenya	New Zealand	West	Bermuda	Lebanon
Liberia	Pakistan	Germany	Colombia	Muscat & Oman
Libya	Philippines	Iceland	Chile	Qatar
Malagasy	Singapore	Luxembourg	Costa Rica	Saudi Arabia
Malawi	Sri Lanka	Nether-	Ecuador	Syria
Morocco	Thailand	lands	El Savador	United Arab
Negeria	Khmer	Norway	Grenada	Emirates
Reunion	Korea	Portugal	Guatemala	Afganistan
Rhodesia	Sabah	Spain	Haiti	Iran
Rwanda	Serawak	Sweden	Honduras	
Sierra Leone	Vietnam	Switzer-	Jamaica	
	China	land	Mexico	
South Africa		Yugoslavia	Nicaragua	
Sudan			Panama	
Lesotho			Paraguay	
Tanzania			Peru	
Tunisia			Surinam	
Egypt			Trinidad &	
Seychelles			Tobago	
Uganda			St.Kitts	
Mauritius			St.Lusia	
Zaire			St.Vincent	
Zambia				
Zimbabwe				

Sources: Liskin, 1982: K-14; Potts and Paxman, 1984: 10.

2.3 Advantages of Depo Provera

Based on the extensive epidemiological, biochemical, and clinical data available to date, DP appears to be an acceptable method of fertility regulation. Clinical evidence from more than 15 years of use shows no additional, and possibly fewer, adverse side effects than are found with other hormonal methods of contraception. The particular advantages of DP as highly effective, long lasting, and reversible make it an important option for women desiring a method of fertility regulation [WHO, 1982: 199].

From the users point of view, DP is attractive. Reports from

family planning programs everywhere show that, where women were offered a choice of contraceptive methods which included an injectable, between one quarter and three quarters chose the injectable [Mackay, et al, 1971: 155; McDaniel and Pardthaisong, 1974: 175]. Effectiveness, convenience, reversibility and freedom from fear of forgetting [Dodds, 1975: 15], and the fact that husbands cannot interfere with its use are major reasons for the popularity of DP [Mc Daniel and Pardthaisong, 1974: 175]. The mode of administration is also an asset [Dodds, 1975: 22].

Another important advantage is that DP does not inhibit lactation as the pill sometimes does. In fact DP may actually increase both the duration of lactation and the volume of milk. It is therefore preferable for postpartum use, especially in countries where mothers breast feed their children for long periods [Benagiano and Fraser, 1981: 512].

A contraceptive which does not reduce lactation is welcome for two reasons. Firstly, it can be offered to women in the postpartum period, a time when women may be motivated to accept contraception. Secondly, contrary to popular thought, ovulation and conception can occur before the end of lactation amenorrhoea so lactating women need contraception as early as possible [Ginneken, 1974: 204]. The method of administration is also a great advantage, compared to IUDs. Most rural and religious (Moslem) women still reject the exposure of their genital organs to strangers, even medical personnel [Lubis and Prihartono, 1984: 5].

Injectables have great potential for wider distribution and use. DP can be stored without refrigeration for up to five years [Rinehart, 1975: K-12]. Paramedical personnel can easily give injections. Dropping the requirement that a women have a pelvic examination before receiving an injection would broaden its acceptance in many areas [Mc Daniel, 1974: 179].

2.4 The Effectiveness and Continuation rates of Depo Provera

2.4.1 The Effectiveness of Depo Provera

The standard doses of DP (150 mg for three months) offer highly effective protection against pregnancy. According to some studies, DP prevents pregnancy in several ways. These are primarily: inhibiting ovulation by suppressing the FSH and LH release [Saleh, et al., 1983: 48; Mackay, et al., 1971: 245; Goebelmann, et al., 1979: 297; Kane, 1983: 71], making cervical mucus thick, thus creating a barrier to sperm [Mackay, et al., 1971: 156; Mahgoub and Karim, 1972: 21-29]. Furthermore, it makes the endometrium less suitable for the implantation of fertilized ovum [Mahgoub and Karim, 1972: 21-29; Mc Daniel, 1974: 177], and possibly changes the rate of ovum transport through the oviducts [Mackay, et al., 1971: 232; Mc Daniel, 1974: 177].

The effectiveness of injectables, particularly DP, may vary, depending on: the time of the injection, the rate of metabolism of the drug, the woman's weight and the injection technique. To ensure that a woman is not pregnant when she is injected, it is widely recommended that injectables be administered during the first five to seven days of a woman's menstrual cycle [Powell and Seymour, 1971: 30; Benagiano and Fraser, 1981: 514; Siritwongse, et al., 1982: 492]. Injections given early in the cycle may be more effective in preventing conception. Most accidental pregnancies occur either shortly after the first injection, or just before the end of an injection interval when its effects have begun to wear off [Rinehart, 1975: K-4].

Pregnancy rates (method failures) have been consistently low, with 0.4 per 100 women years [WHO, 1983: 3]. In the large scale collaborative study of 3,857 US and Latin American women, the cumulative failure rate calculated by the life table technique was 0.31 pregnancies per 100 women years and ranged up to 0.90 for 36-70 months [Cited by Upjohn, 1978: 279]. Thus currently available data indicate that DP is more effective than oral contraceptive taken regularly (with failure rates of about 2 per hundred women years) [Rinehart, 1975: A-53], and markedly more effective than IUDs (with failure rates ranging from 1.7 - 3.8 per hundred women years) [Liskin, 1982: B-103].

2.4.2 The Continuation Rates of Depo Provera

The continuation rates of DP have been found to vary markedly among different populations, ranging from 50 per cent to nearly 90 per cent at one year of use and 40 per cent to 68 per cent at two years of use [Nash, 1975: 377].

Women may find menstrual disturbances upsetting, because it is often thought that irregular or excessive bleeding is a symptom of sickness or that amenorrhoea is a sign of pregnancy. Religious practices, folk beliefs, and rumors may also contribute to a women's concern [Mahgoub and Karim, 1971: 741]. Despite the side effects of DP, 60 per cent or more of all users can be expected to continue with the method for at least one year [Rinehart, 1975: K-7; Narkavonnakit, et al., 1982: 101]. But with good counselling and better quality services, "DP continuation rates in Thailand are at least comparable to pills and IUD", i. e. 70 per cent for the first year and 57 per cent for the second year of use [Baldwin, 1978: 304]. Even in Bangladesh DP continuation rates were considerably higher than those for the pill [Huber, 1976; 249]. If fear can be eliminated, many women will tolerate side effects. Poor nutrition and short birth intervals in developing countries may make regular menstrual patterns the exception rather than the rule. Clinicians from various areas report that many women actually are pleased by the absence of menstruation [Rinehart, 1975: K-8]. The continuation rates of DP mostly depend on the easy availability of other methods, education, cultural factors and the availability of DP itself [Baldwin, 1978: 305], (see Figure 2.1).

2.5 The Side Effects of Depo Provera.

Like all other contraceptives, DP has a series of important side-effects that users should understand. In a great majority of users, injectables cause serious alterations in uterine bleeding and most women, after prolonged use, have long intervals of amenorrhoea. Weight-gain can also be associated with the use of the drug [McDaniel, 1980: 15; Ali, 1978; 63- 70].

Menstrual cycle disruptions: All progestagens, but especially

injectables, disrupt menstrual patterns. Women using injectables may experience shorter or longer cycles, increased or decreased menstrual flow, and spotting [Mahgoub and Karim, 1972: 25; McDaniel and Pardthaisong, 1974: 178]. Much more upsetting may be irregular bleeding and spotting. This can be a real drawback for women whose culture or religion limits their activities when they are bleeding, and it may increase anaemia [Kane, 1983: 73]. Generally, over two thirds of women using DP have no regular cycles in the first year of use. Menstrual effects depend on the length of use. Inter-menstrual bleeding and spotting decrease with time, whereas amenorrhoea increases [Ali, 1978: 65; Swenson, 1980: 210]. Heavy bleeding, a potential health threat, is rare. In the first WHO multi-centre trial, only 6 of 1,214 women, or 0.5 per cent required treatment for either heavy or prolonged bleeding during 13,800 women-months of use [WHO, 1978: 1-7]. Changes in menstrual patterns are largely unpredictable. Amenorrhoea appears to be more common in DP users with greater body weights [Chinnatamby, 1971: 234-235].

Management of Bleeding: It was originally believed possible to overcome some of those menstrual disruptions by administering estrogen supplements (either orally or by injection). Estrogen has proved to be of value in suppressing excessive and irregular bleeding and is also capable of inducing menstrual-like bleeding in amenorrhoeic subjects [Topozada, 1978: 441]. But a recent study has shown that careful counselling of acceptors has allowed the omission of estrogen supplements. Since one of the advantages of the injectable is its absence of estrogen, skillful and periodic counselling is needed to help clients accept whatever degree of menstrual disruptions they may experience [Baldwin, 1978: 303].

Weight gain: this may be an advantage to some and disadvantage to others, and occurs in the majority of DP users. In clinical studies mean weight gain has ranged from 1.4 pounds to 9.0 pounds in the first year of use, but then it stabilizes or decreases [Chinnatamby, 1971: 230; Leiman, 1972: 99].

Cardiovascular effects: DP appears to have little effect on either blood pressure or blood regulation. Most studies show no significant change in systolic and diastolic blood pressure in women using DP [Ali,

1978: 69; Chinnatamby, 1971: 225; Mackay, et al., 1971: 225; Powell and Seymour, 1971: 39].

Other side-effects: Other complaints reported by users of DP include nausea, dizziness, headaches, nervousness, chills, change in skin pigmentation, painful menstruation, lessening of libido, diminished orgasm and acne. How often these side-effects occur and what proportion of users experience them, varies from one study to the next as these are often highly subjective symptoms. Generally, however, these side effects are very rare [Mackay, et al., 1971: 152].

Effect on breast-fed infants: DP does not appear to have any deleterious effects on the quantity or nutritive value of breast milk. As mentioned, some studies have suggested an increase in the quantity of breastmilk. It should be noted that the quantity of steroid received by the infant is considerably less than the amount of estrogen to which children bottle-fed with cows milk are exposed [Vorherr, 1973: 1011; WHO, 1982: 205-206; Fotherby, et al., 1983: 405]. Other studies of children reported no discernible effects of exposure to DP in breastmilk, no difference in growth or physical or mental development in children of DP users and non users followed for up to 4-5 years, and no detectable physical, mental, or bone abnormalities in children whose mothers had used DP [Benagiano and Fraser, 1981: 516].

2.6 Fertility Related Effects

The return to normal menstruation and fertility is usually delayed for a few months after discontinuing the drug. Although a 150 mg injection is not considered effective as a contraceptive for more than 90 days, in most women DP prevents pregnancy for a longer period. In a large study of Thai women who stopped contraception to become pregnant, the median delay to conception was 5.5 months (plus the estimated duration of the effect of the last injection of DP), [Pardthaisong, 1984: 23], compared with 4.5 months for former IUD users and 3 months for former pill users. The proportion of women who did not conceive within 9 months after discontinuation of DP is similar to that of ex-IUD users, and by 3 years similar to that of the ex-pill users. There is no evidence to suggest that prolonged use of DP increases delays in conception [Pardthaisong, 1984: 23].

No evidence suggests that DP permanently impairs fertility. More than 50 per cent of women are menstruating six months after discontinuation and about 85 per cent by one year after, suggesting that fertility has returned [Basnayake, 1981: 7]. Over 60 per cent of women become pregnant within one year after discontinuation, and over 90 per cent within two years [Barten, 1982: 4]. A Thai study found that by two years after discontinuation 92 per cent of the DP users, 93 per cent of the IUD users, and 95 per cent of pill users had become pregnant. These differences are not statistically significant. Furthermore, there were no significant differences between those who conceived immediately after discontinuation and those who conceived later; nor between those who used it for a shorter period as compared with those who used it for longer [Pardthaisong, 1984: 32].

2.7 The Current Status of Depo Provera

Many investigators, particularly those interested in family planning, have studied the clinical use of DP (especially 3 month and 6 month injections) in various parts of the world. Hundreds of publications have reported on almost every conceivable aspect of the pharmacology, toxicology and clinical use of this drug. Up to 1981, 900 references about DP were available [Fraser and Weisberg, 1981: 3-19].

All available evidence on the safety of DP has been reviewed in detail on three separate occasions by the FDA's Advisory Committees on Epidemiology and Biometry. All scientists, researchers and family planning officers who gave testimonies to The US House of Representatives Select Committee on Population, August 8, 9 and 10, 1978, advised the FDA to approve the use of DP as a contraceptive [DP Debate, 1978: 1-789].

Data on DP have also been analyzed in depth by:

- World Health Organization (WHO) Toxicology Review panel to the Special Program of Research in Human Reproduction. Their study was conducted in 15 developed and developing countries.

- A Special ad hoc Consultative Panel convened by the US Agency for International Development.

- The International Medical Advisory Panel of the International Planned Parenthood Federation (IPPF).

All these national and international bodies have concluded that there are no toxicological or medical reasons for discontinuing the use of DP as a contraceptive [Benagiano and Fraser, 1981: 497].

All FDA reasons for refusal were severely criticised during the August 1978 Hearing of the US House of Representatives Select Committee on Population. Of five reasons, four were not based on solid evidence (reasons no: 2, 3, 4, 5, see appendix A). The incidence rate of cervical cancer (reason no: 1) is still comparable with IUD and pill users. A study in 1972 showed 1 per 1000 users [Benagiano, 1978: 203], and another study showed 3.8 per 1000 women years [Senanayake, 1978: 339]. It seems therefore that the USFDA may not have properly evaluated the risks versus the benefits of using DP, before deciding to refuse the marketing applications. All drug use entails some risks and the relevant question for the user or the physician is whether such risks are commensurate with the benefits. DP is not a perfect contraceptive nor is it free of problems. However, one cannot ignore the fact that in many societies, especially outside Western countries, women appear to find DP an acceptable contraceptive and some times even prefer it to other methods [McDaniel, 1980: 4; Baldwin, 1982: 6; Barten, 1984: 3]. Based on current knowledge, DP is a satisfactory contraceptive with several advantages and some disadvantages, and poses no more unresolved problems than oral contraceptives [Benagiano and Fraser, 1981: 495].

CHAPTER 3

DEPO PROVERA IN THE INDONESIAN FAMILY PLANNING PROGRAM.

3.1 Introduction

Conditions in the early 1970s appeared relatively favourable for family planning program development. Fast population growth and density, and socio-economic development had prepared for a large scale change in reproductive behaviour. The long standing, relatively high position of women in Indonesia, as in all of South East Asia, was conducive to the introduction of modern fertility limitation. The culture supported a system in which a central authority could provide strong leadership for broad social change. Since 1966, the government has made a major and largely successful effort to develop an administrative system that functions as an effective instrument of state policy [Sumbung, 1981: 18].

A strong conditions were important, they were only enabling conditions. They reflected a society ready for change and a government mobilized to direct change, especially toward fertility limitation. Government and society still, however, had to develop specific strategies and means for fertility reduction. Providing these mechanisms was the task of the national family planning program and its administrative structure, the NFPCB [Rohadi, et al., 1977: 7].

The demand for contraception began long before the official family planning program started. In villages countless mothers who wanted to avoid another pregnancy had tried traditional devices; herbs, massage, long periods of abstinence, and long durations of lactation. Some succeeded and some did not. For the unlucky ones, abortion was the last

resort to terminate their pregnancy with the risk of untimely death. Considering this unfortunate situation the accessibility and availability of effective contraceptives through the family planning program eased the burden for those who want to control their fertility, and fortunately, the government provided what the people needed.

After more than a decade of implementation, at the end of March 1985 the program had recruited 18.7 million acceptors, of whom 15.7 million were current users. [NFPCB, 1984: 1-3]. Although this progress was encouraging, it was not without challengers.

Every year the numbers of married women in the reproductive ages (MWRA) increases by some 600,000 to 1 million women so that the incoming new MWRA exceed outgoing MWRA by more than 7 to 20 times. This trend has forced the program to exert extra effort to recruit more acceptors [Haryono Suyono, 1984: 2].

The trend is that new acceptors will have the characteristics of low parity and younger age. In 1971/1972 the average age of new acceptors in Java and Bali was 29.5 years, and declined to 25.03 in 1982/1983. For Outer islands I the median age figures were 30.18 in 1974/1975 and 26.79 in 1982/1983. The number of living children of new acceptors is also declining. The Java-Bali median parity was 3.77 in 1971/1972 and only 2.05 in 1982/1983. For Outer Islands I the median living children figures were 4.2 in 1974/1975 and 3.0 in 1982/1983 (Figure 3. 1) These acceptors have a tendency to drop-out for the purpose of having another child. after a short duration of using contraceptives. Controlling their reproductive behaviour is difficult unless they accept the small family norm [Poedjo Rahardjo, 1984: 14; NFPCB, 1982: 101].

There are still some groups in Indonesian society who are reluctant to respond to the Program. They are mostly uneducated rural and religious people, who do not want to use any method if their religious leader does not approve. Some religious leaders still do not approve methods which need the exposure of female genital organs when administered, and methods which interfere with sexual activities (barrier methods). At the same time, some women will not agree to swallow pills every day [Haryono Suyono, 1984: 2].

Success in recruiting acceptors alone is not enough. New acceptors

must be sufficiently satisfied with their contraceptive method to want to continue practicing family planning. The methods with the longest continuation rates will ultimately have greatest impact upon fertility. Satisfaction with contraceptive methods and continuation will ultimately depend upon their effectiveness, convenience, appropriateness, approval by religious and cultural leaders, and whether they are within the grasp of all people and widely available.

Accordingly, the Program began trials of injectable contraceptives. It was hoped that this new method would meet the above requirements, satisfy users and increase participation and continuation.

3.2 Steps in the introduction of Depo Provera

3.2.1 First awareness of Depo Provera

As in other countries, it is not easy to change a pro-natal community where children are highly valued from the economic, sociological, and psychological stand point to accept a "Small, Happy and Prosperous Family" norm.

Samekto [1984: 3] points out that four main factors affect the fertility rate: abortion, sterilization, the use of contraception and delayed marriage. Up to now, only one of these four, the use of contraception has been actively promoted in Indonesia, while the other three factors are still awaiting justification, legalization and action.

At present, the main efforts aims to ensure that contraceptives are used by more people, by their own choice, starting as early as possible in marriage, and for a longer time and with the minimum risk of side effects and failure. However, especially in villages, Indonesia still faces ignorance, poverty and lack of proper education and discipline, particularly in family planning practices. This leads to many drop-outs in contraceptive use and method failures.

3.2.2 Independent Clinical Studies

In Indonesia, Depo Medroxy Progesterone Acetate (DMPA), was used as a medical treatment of various conditions, such as breast cancer, premature labour and endometrial treatment. [Sabirin, 1976: 2]. Its use as a contraceptive initially took place in some hospitals in trial studies conducted by gynecologists. Details are given in Appendix C.

Up to this point, studies of injectables as contraceptives had mostly been by observation, interview and recall of experience. Pregnancy rates, side effects, continuation rates and reversibility can be detected by simple record keeping. But in-depth analysis, such as breast and endometrial cancer, serum lipids, the effects on breast milk and long use effects need laboratory trials. Early field trials suffered from a lack of sample variety and were drawn in a very limited time to make a general conclusion. Barten [1976: 52] pointed out that DP has been available through private channels and services although the trials seemed to be still incomplete. Thus conditions pushed the NFPCB to coordinate studies of injectables. Although studies are continuing they still suffer from under representation of all Indonesian tribes and lack coverage of teragonic effects and physical/health effects caused by long term amenorrhea.

Experience over several years has shown a great variation in the results of clinical trials of injectables. This results from differences in study design, or from differences in the approach to data analysis. With regard to study design, the comparability of different trials is influenced by the sample size employed and especially by the lack of standardization of factors such as subject recruitment, the criteria used for excluding certain subjects, the frequency and nature of the procedures employed for follow up, and the type of observations made or the method of recording them. Furthermore, differences in analytical approaches and presentation of results can create confusion.

There is, therefore, a need for the Program to coordinate all the trials done in Indonesia and utilize the same standard methodology, so that information on fertility regulating methods can be clearly interpreted, and the results would be representative of diverse populations and conditions. The Program conducted some seminar on the

management of DP. The participants were chosen from medical researchers and family planning program officers involved in medical research and medical services. Details of these seminars are given in Appendix E.

3.2.3 Field Trials

Based on the recommendations of the first seminar, the NFPCB coordinated the implementation of field trials, offering DP in several hospitals and clinics under hospital control, and focussed on six provinces of Java and Bali, (April 1977 to August 1979). The trials recruited 22,500 women, but only 1448 women completed the trial series of eight injections.

Numbers completing the trials were:

Jakarta	Province	33	users
West Java	province	148	users
Central Java	Province	688	users
East Java	Province	184	users
Yogyakarta	Province	303	users
Bali	Province	92	users

Total (Java and Bali)		1448	users

[NFPCB, 1979: 1-17].

The trials yielded the following results.

1. Most users were in the young age group; 74 per cent aged 20 to 30. This is somewhat higher than acceptors of all methods in the same year (1979) for Java and Bali: 63.5 per cent, [NFPCB, 1982: 100].

2. Most users were educated. Seventy-eight per cent had attended Elementary School to Senior High School. This was comparable with the results of modular surveys for Java and Bali, which found that for all methods the figure was 84 per cent [Poedjo Rahardjo, 1984: 10].

3. The continuation rate was 71 per cent in the first year and 47.3 per cent in the second year. These results were higher than studies done by Pardoko (1974) and Sulaiman (1970), which found continuation

rates for DP of 55 per cent and 54.8 per cent for the first year and 34.0 per cent and 19.9 per cent for the second year respectively. Possibly DP had become more popular, because the services could be obtained easily and free of charge during the trials.

4. Many users suffered from amenorrhoea and bleeding (spotting and irregular bleeding).

Amenorrhoea, ranged from 29.6 per cent to 36.3 per cent for the first to the eighth injections. These figures were significantly different from other studies done in Indonesia. Agoestina (1972) and Pardoko (1974) found that the percentage of amenorrhea rose from 25.7 per cent to 60.0 per cent and 45 per cent to 100 per cent respectively for the first to eighth injections. This variation might be due to socio-economic reasons as most women in Java and Bali now have better health and nutrition status compared to condition in the 1970s when Agoestina and Pardoko conducted their studies.

Bleeding, ranged from 21.6 per cent at the first injection to 6.4 per cent at the seventh injection. This figure was comparable with Agoestina's and Pardoko's findings.

5. The pregnancy rate was 1.3 per 100 women. Compared to WHO studies, which found 0.4 per 100 women, this looks very high [WHO, 1983: 3]. These result may be affected by human failures/technical failures, not drug failure. A careful injection technique is essential, and if not all of the drug is drawn into the syringe from the container, the dose may be inadequate. If the drug is not injected deep into the muscle or if the rate of absorption is accelerated (by rubbing the site), the period of contraceptive efficacy may be shortened [Liskin, 1983: K-26].

3.2.4 Implementing the Program

After reviewing all data available and identifying the advantages of DP as well as noting the success of DP in Thailand [McDaniel, 1980: 88-92], Philippines [Rosario, 1980: 72-76] and North Sulawesi [Barten, 1980: 52-58], the NFPCB decided to accept it for the National Program in late 1980.

The NFPCB policy on DP was to fully support DP users by offering DP

free like other methods already available. DP would account for at least 10 per cent of all methods available in the Program every year. Furthermore, the study of this drug would be continued to gain more experience in managing long run side effects, and more experience and information from other sources would be collected to develop policies on DP use [NFPCB, 1980: 3].

3.2.5 Procurement

Although the NFPCB had accepted DP as a method for family planning services in 1980, due to the difficulties of supply for mass usage, almost two years later, the society still could not offer it at family planning clinics free of charge. From commercial channels/services it could be purchased at Rp3000 to Rp5000 each. The problem was that the Program could not fund the drug nor obtain it from foreign donors such as USAID, who had previously given IUDs and Pills.

For the trials, in the period 1977-1979, the drugs was partly supplied by the Upjohn Company, now manufacturing in Jakarta, and the IPPF through IPPA services, with the remainder purchased by the Program from Upjohn. Since 1982, the Program has had government funds to buy DP, and has offered it widely to the entire country. The drug is now available both in the family planning program and through commercial channels.

3.2.6 Distribution and the Logistics of Depo Provera

In order to reduce dependency on foreign countries, efforts were directed at domestic manufacture of contraceptives, including IUDs, pills, condoms, and DP by stimulating private enterprise to produce them. Most of these modern contraceptives are now manufactured in Indonesia and DP is purchased by the Indonesian Government with local currency, which reduces logistic problems in obtaining the drug.

The distribution of DP is like that of other methods of contraception (IUDs, pills, condoms): from a central office or

warehouse to provinces, regencies and municipalities and smaller units, and sent by professional companies hired by the Program [NFPCB, 1982: 83]. DP is available in the health centres and also Mobile Medical Teams, which visit remote areas once a month. Up to now, there have not been any problems concerning the storage of the drug, due to its long shelf life.

3.3 The Spread of Depo Provera throughout the country

The spread of DP throughout the country, can be observed from the monthly family planning report issued by the Bureau of Reporting and Recording, NFPCB. These reports show the progress of recruiting new acceptors every month for entire provinces in Indonesia, since the family planning program started.

Table 3-1 shows growth in the use of DP since 1976 as well as changes in the use of other methods. By 1979/1980 DP was used by 2.5 per cent, and by 1983/1984 by 24.4 per cent. Its popularity is especially noticeable for Java and Bali. It is also noticeable that when DP became available in 1982 the pill began to lose popularity. In 1983/1984 the percentage of new acceptors choosing DP was close to that for the IUD, (see also figure 3.3)

Table 3-1: Number of acceptors and the percentage,
Java and Bali, 1976 - 1983.

! Contraceptive methods and percent.						
Years !	-----					
*) !	IUD	Pill	Condom	DP	Others	Total

1976/	334,923	1,242,225	241,763	20,109	15,310	1,854,330
1977	(18.0)	(67.0)	(13.0)	(1.1)	(0.8)	(100.0)
1977/	307,856	1,269,979	172,330	34,219	25,772	1,810,156
1978	(17.0)	(70.2)	(9.5)	(1.9)	(1.4)	(100.0)
1978/	334,139	1,108,821	133,493	42,765	26,518	1,645,736
1979	(20.3)	(67.4)	(8.1)	(2.6)	(1.6)	(100.0)
1979/	337,590	1,169,828	129,800	42,454	31,900	1,711,572
1980	(19.7)	(68.4)	(7.6)	(2.5)	(1.9)	(100.0)
1980/	381,967	1,372,130	165,048	58,864	33,958	2,011,967
1981	(19.0)	(68.2)	(8.2)	(2.9)	(1.7)	(100.0)
1981/	447,730	1,223,881	112,963	147,243	44,984	1,976,801
1982	(22.7)	(61.9)	(5.7)	(7.5)	(2.3)	(100.0)
1982/	696,797	1,349,188	117,485	511,352	66,460	2,741,282
1983	(25.4)	(49.2)	(4.3)	(18.7)	(2.4)	(100.0)
1983/	1,093,919	1,575,363	98,679	918,328	85,330	3,771,619
1984	(29.0)	(41.8)	(2.6)	(24.4)	(2.3)	(100.0)

Note: *) the financial year is calculated from first of April up to 31 of March in the following year.

Numbers in bracket is the percentage.

Source: Calculated from NFPCB Service Statistics,
Reported at April 1984.

The new acceptors of DP rose steadily from one per cent in 1976, to more than ten per cent in 1983/1984. In 1983/1984, there were almost 10 million current users, of whom, 10 per cent used DP. In this year, the highest percentage of DP users among new acceptors was in West Java province, 32 per cent, followed by Jakarta, 28 per cent, and Central Java, 23 per cent (Table 3-2, see also figure 3.4.

Table 3-2: Number of New Acceptors of DP and the percentage by province, Java and Bali, 1976-1983.

YEARS *)	! Bali ! Numb. Acc	! East Java ! Numb. Accp	! Cent Jav ! Numb. Acc	! Yogya ! Numb. Acc	! West Java ! Numb. Accp	Jakarta ! Numb. Acc
1976/ 1977	119 (0.3)	5050 (0.9)	4432 (0.9)	1349 (2.6)	5936 (1.1)	3223 (2.5)
1977/ 1978	516 (1.2)	8969 (1.9)	9580 (1.9)	2134 (3.5)	10174 (1.7)	2846 (2.3)
1978/ 1979	384 (1.1)	8454 (2.1)	13600 (2.8)	2164 (4.0)	12578 (2.3)	5585 (5.1)
1979/ 1980	723 (1.7)	6228 (1.5)	16252 (2.9)	1473 (2.9)	11664 (2.3)	6114 (5.1)
1980/ 1981	779 (1.9)	11155 (2.5)	20794 (2.8)	2495 (3.8)	14327 (2.6)	9314 (6.0)
1981/ 1982	2015 (4.5)	20591 (4.1)	33855 (5.2)	4012 (7.5)	67462 (12.2)	19308 (11.1)
1982/ 1983	2884 (6.1)	37734 (6.2)	117028 (14.2)	4448 (8.7)	300425 (30.5)	48833 (21.9)
1983/ 1984	5419 (10.7)	103265 (12.5)	227360 (22.7)	5810 (10.4)	484352 (32.1)	92122 (28.4)

Note: Fiscal year calculated from the first of April up to 31 of March in the following year.

Numbers in bracket are the percentage

source: Calculated from NFPCB Service Statistic, April 1984.

3.4 Acceptability of Depo Provera, according to the results of Modular Surveys

The acceptability of DP by Indonesian women can be divided into; initial acceptance (the use of contraception), and the continuation of use (continuation rates) [NFPCB, 1976: 12]. Its use can be observed from the spread of the drug and numbers of new DP acceptors, as reported monthly by the Program, (in Section 3 above). The continuation rate can be seen from the results of the 1982 family planning Modular Surveys. Module 4 investigated the length of contraceptive use and reasons for discontinuation. The basic questionnaire obtained information in the following broad categories of interest: clinical record keeping procedures, post acceptance use-effectiveness rates with a detailed examination of reasons for termination, and a few questions pertaining to Program and non-program service. Reasons for acceptance and the acceptors characteristics were not covered by the clinical record.

The objective of this module was to calculate the continuation rates, identify reasons for stopping and to assess use-effectiveness or avoidance of pregnancy rates. It collected information from acceptors who had received or used contraceptive methods between April 1, 1977 and March 31, 1982. Module 4 focussed on data for six provinces Java and Bali, as shown in Table 3-3.

As mentioned earlier, these surveys covered all methods available in the Program, 1977 to early 1982, when the number of DP users was relatively small compared to users of other methods, (1.9 per cent for 1977/1978, 2.6 per cent for 1978/1979, 2.5 per cent for 1979/1980, 2.9 per cent for 1980/1981 and 7.5 in 1981/1982). Since only 13 per cent of those covered in this survey were using DP, so the findings were not as complete as for IUDs, pills and condoms.

Table 3-3: Size of sample and respondents completing the interview, Java and Bali, 1982.

Province	! number of ! women	! Lost to follow-up ! number !	! per cent* !	! Respondents ! completed interview
Jakarta	2,304	845	36.7	1,464
W. Java	2,036	383	18.8	1,653
C. Java	2,303	708	30.7	1,595
Yogya	2,214	473	21.4	1,741
E. Java	2,053	600	29.2	1,453
Bali	2,345	599	25.5	1,746
Java-Bali	13,260	3,608	27.2	9,652

Note: * percentage of number of sample

Source: Java and Bali Family Planning Modular Surveys, 1982, calculated from IPDP (ANU) records, 1985.

Table 3-4: Depo Provera users covered in the Survey

Province	number of DP users	Percentage
Jakarta	325	14.0
W. Java	452	22.0
C. Java	164	7.0
Yogya	346	15.6
E. Java	315	15.0
Bali	162	6.0
Java-Bali	1764	13.0

Source: Family Planning modular surveys, 1982.

Calculated from IPDP(ANU) records, 1985.

3.4.1 Findings

Overall, the results of these surveys showed that the IUD was the most stable method, with high continuation rates in Java and Bali, followed by pills, but DP and condoms could be considered as less effective methods, with the lowest continuation rates. Those continuation rates appeared not to be influenced by the education of users, but more affected by the motivation of users, age and parity of the acceptors. The older, higher parity acceptors tended to continue for longer periods of time, irrespective of methods used. It seems that regulating fertility and planning families had not yet become usual in 1982. The "Small Size Family" norm, the NFPCB slogan, is easy to read but difficult to achieve.

Compared to the continuation rates for all methods, in Java and Bali of 66.8 per cent after 2 years and 56 per cent after 3 years, the continuation rates for injectables were relatively low, at 61.5 per cent and 45.9 per cent respectively. But the figures for every province, Table 3-5, show that after two years, four provinces, still had relatively high continuation rates Jakarta 61, West Java 81, Yogya 69, and East Java 68. These rates were close to the continuation rates for the IUD for Java and Bali, in the same time spans, 75.2.

Table 3-5: Continuation rates of Depo Provera by province, Java and Bali, 1982.

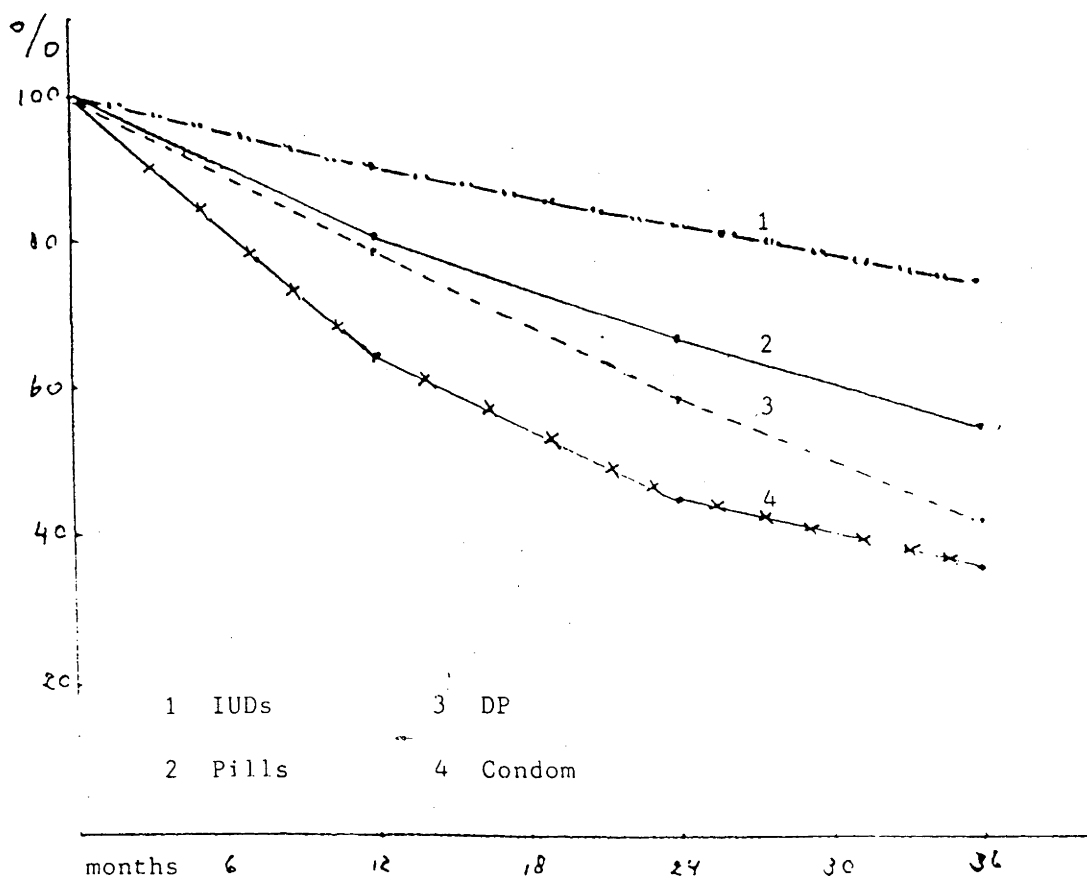
Months! of use!	Jakarta.	W Java.	C Java.	Yogya.	E Java.	Bali.	Java and Bali.
3	90.7	94.3	93.9	94.2	93.3	92.7	93.1
6	88.6	96.7	86.9	92.6	92.2	82.4	89.9
12	80.9	91.9	73.9	86.2	82.2	67.1	80.4
18	70.9	88.2	65.3	79.2	75.1	51.5	71.7
24	61.0	80.8	48.6	68.7	68.1	41.8	61.5
30	49.9	75.7	34.1	57.1	63.1	34.7	52.4
36	42.4	71.3	29.1	44.7	55.8	31.9	45.9
N	325	452	164	346	315	162	1764

Source: Java and Bali FP Modular Surveys, 1982.

Calculated from IPDP (ANU) records, 1985.

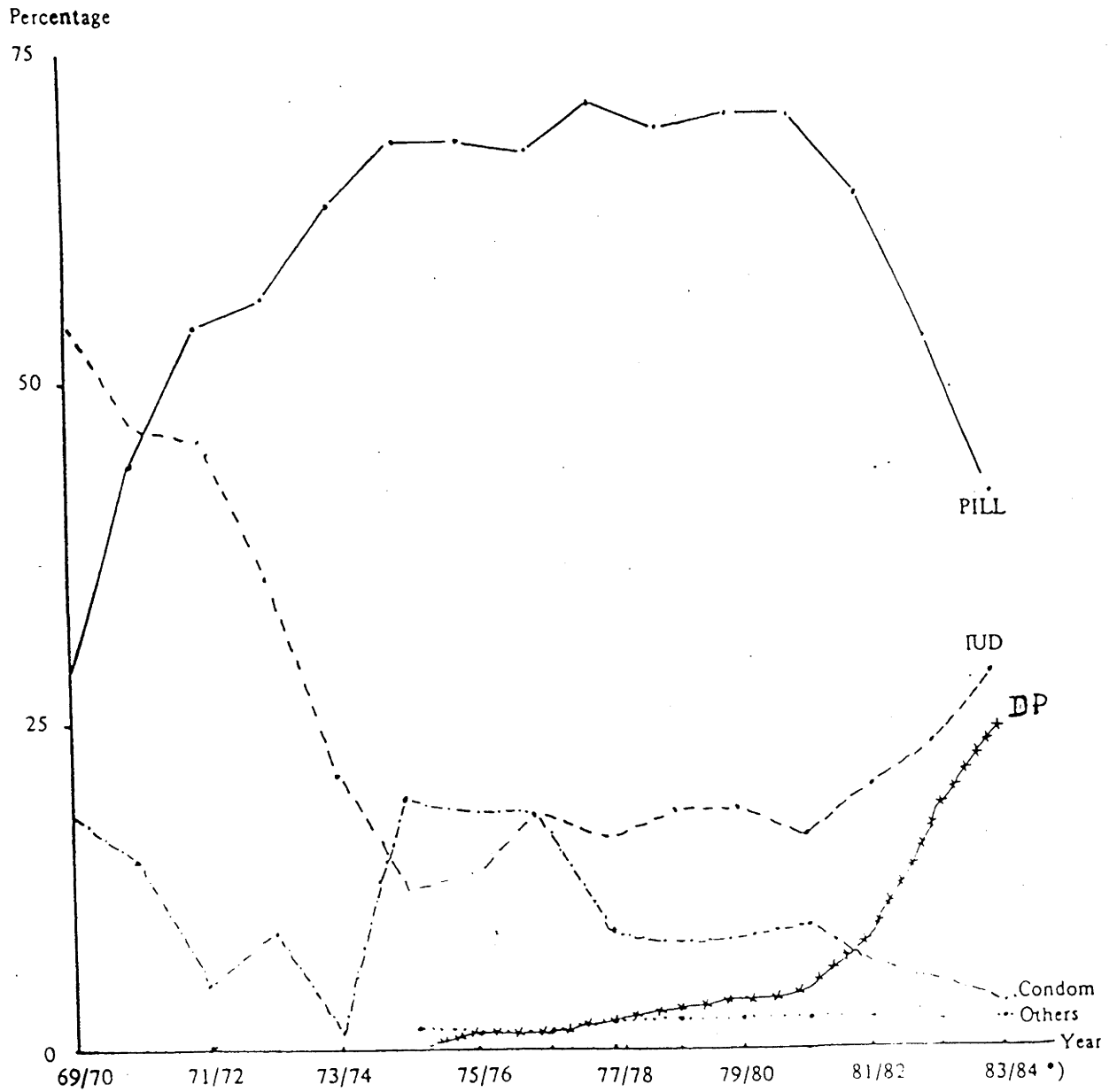
The graph (see Figure 3-1) shows that the continuation of DP at that time (1982) was much less than for the IUD and the pill, and 10 per cent less than the continuation the rates for all methods. This was probably because this study covered DP users who mostly obtained their services from "DP Trials" launched by several family planning clinics and from private services in big cities, while rural women had not yet been reached by these projects. In practice DP only became available for rural women in early 1982. Hence, it is easy to understand that DP users covered by the surveys showed relatively low continuation rates, because the "DP Trial" ended at the 8th injection.

Figure 3-1: Contraceptive continuation rates According to the Results of FP Modular Survey, Java- Bali, 1982.



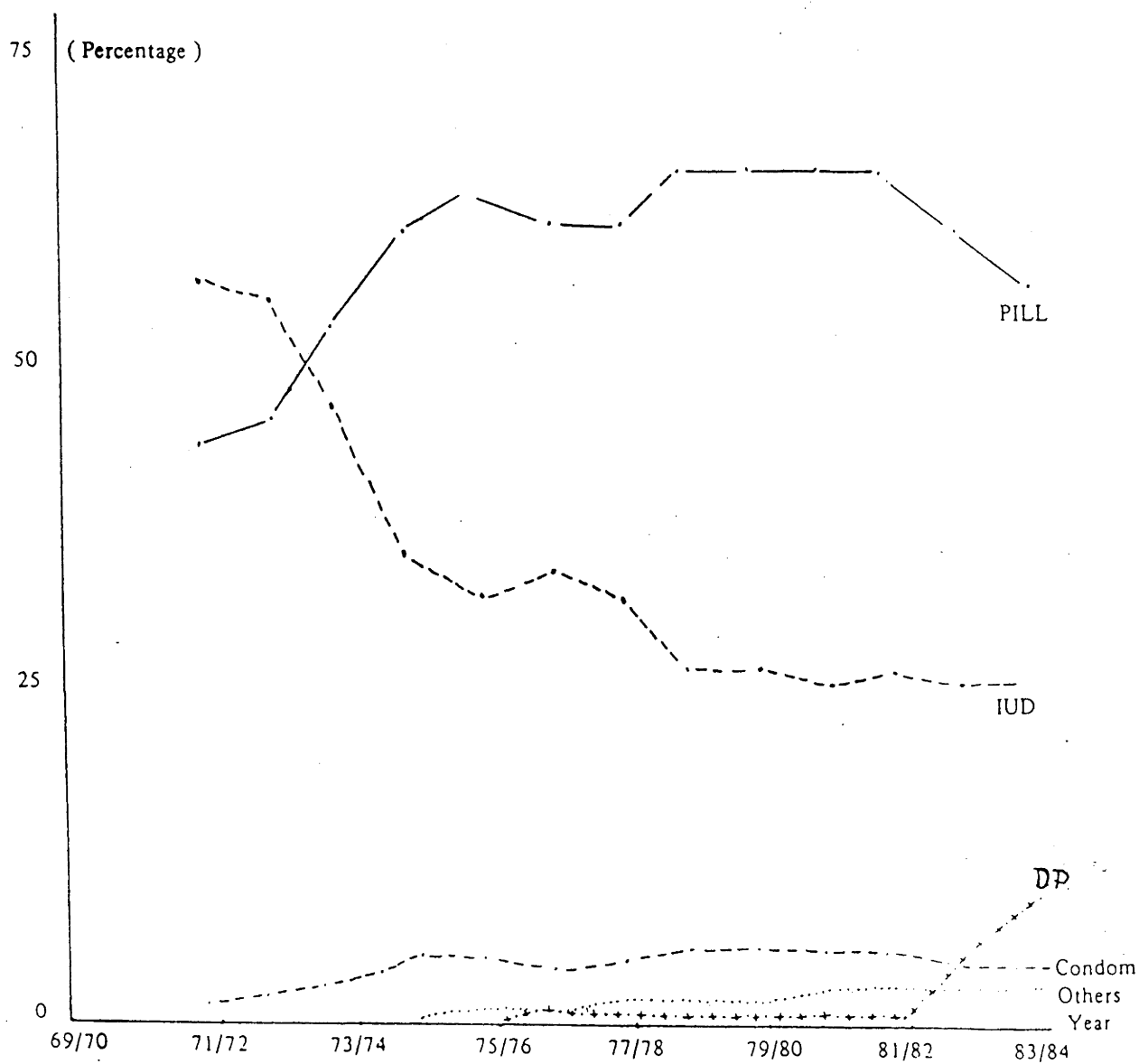
Source: Java and Bali FP Modular surveys, 1982
 Calculated from IPDP(ANU) records, 1985.

Figure 3-2: New Acceptors By Contraceptive Methods, Java and Bali.



*) Data in January 1984 (feedback)

Figure 3-3: Percentage of Current Users by Contraceptive Methods, Java and Bali.



CHAPTER 4

INDONESIAN WOMEN AND DEPO PROVERA:
RESULT OF THE 1985 FIELD STUDY.

4.1 Introduction

Officially, the Indonesian Family Planning Program, has included several brands of hormonal oral contraceptives, IUDs (Lippes loop, Copper, Multiload), condoms and the injectable Depo Provera. It is realized that for a voluntary program, a change in the contraceptive method must suit the demand of the user. In line with the level of progress of medical sciences the expansion of a Program must also be accompanied by upgrading because users will always require the very best methods.

Because of Indonesian experience with modern health facilities, women are accustomed to injections of many kinds of drugs. That this tradition prevails has been shown by the acceptance of Depo Provera. The advantage of this form of contraceptive lies in the simplicity of administration, although it is still accompanied by several disadvantages like the high incidence of menstrual disturbances.

The Objective

Generally, the objective of the field work reported here was to determine the acceptability of the modified injection schedule for Depo Provera based on the conditions prevailing in Indonesia. Furthermore, the specific objectives to be achieved in this study were:

1. To evaluate the acceptance of DP in the large cities as well as in rural areas (Jakarta, Yogyakarta, and outlying areas).
2. To study the inherent effects of the method, especially the menstrual bleeding pattern, and to evaluate the acceptors tolerance towards the side effects mentioned.
3. To make recommendations, where possible, to improve the present motivation and services offered to DP users.

4. To make recommendations, if possible, to change the policies in implementing the use of this contraceptive.

It is also hoped that this limited study will provide the groundwork of future studies regarding Depo Provera in Indonesia.

4.2 The Jakarta, Bandung and Yogyakarta field survey

These three cities were chosen for the study for several reasons. Firstly, as the population of Jakarta is ethnically the most heterogeneous city in Indonesia, it can be considered, in many ways, as a demographic and sociological laboratory. A careful study of the population of the city should throw light on the demographic and sociological future of all Indonesian [Merten, 1976: 50]. It is hoped that by the selection of this area the impact of ethnicity will be minimized. Secondly, the Central office of the Program is located in Jakarta, which means that the distribution system for DP would cover the whole city and reach every clinic. Thirdly, Yogyakarta and Bandung are chosen as representative of the two biggest ethnic groups in Java (Yogyakarta represents Javanese and Bandung represents Sundanese). Finally, the most important reason, was the limited budget and time for this study which precluded inclusion of other areas.

It appears that there is not much difference between DP users in Jakarta, Bandung and Yogyakarta due to:

- The respondents mostly obtained the service from FP clinics which used the drugs supplied by the Program, produced by one company, Upjohn.

- The groups of women who have a favourable risk to benefits ratio for DP use can be found everywhere in Indonesia and in the three cities under study as well. These groups are:

1. Women who have completed their families, or those with minimum of 2 children (as required by the Program, see Appendix E).
2. Women who are intolerant to or have a contra-indication to use of pills or IUDs.
3. Women who were not bothered by cycle disturbances or prolonged amenorrhoea.
4. Women who are liable to forget or get mixed-up about the daily intake of pills.
5. Couples who did not agree to use condoms or other barrier

methods.

6. Lactating women.

- The risk- benefit of the drugs for all women in the areas under study were almost the same, due to the relatively small differences in socio-economics conditions.

- The IEC and the services provided by the Program for DP, were more or less the same in each place.

Therefore, the respondents are considered as equal.

4.2.1 The Respondents

Those eligible to be interviewed were DP users who were still using the drug at the time of interview, and those who were no longer using DP. The latter group were only asked the reasons why they stopped, and no longer considered as respondents. Those still protected by DP were considered as respondents if they did not refuse to be interviewed.

The eligible respondents were chosen from the list of addresses of DP users in clinics or hospitals which offered family planning services. But some addresses were also obtained from Village Contraceptive Distribution Centres (VCDCs) in Jakarta and Yogyakarta, and from Family Planning Field Workers, mainly group leaders and supervisors. These latter source, supplied information on users from private services.

The areas in this study were in three cities, as follows:

1. The city of Jakarta is a rapidly growing city with a population of nearly 6.5 million. Of this number, 94 per cent live in urban areas, and only 6 per cent live in rural areas [BPS, 1980: 79-80]. The people in Jakarta are highly mobile and tend to be in a hurry due to their jobs and their life style, as the tempo of life runs very fast. Its inhabitants include many of the sub-races or ethnic groups found in Indonesia, but most of them are from the provinces of Java, [Ardjoboeseono, 1978: 6].

Jakarta eligible respondents were chosen from 15 clinics around the city. Ten addresses were taken from every clinic, totalling 150. During field visits, 20 more addresses were selected from five VCDCs lists of family planning acceptors in their respective areas, which were covered by this study as well. From the grand total of 170 Jakarta eligible respondents 76.5 per cent were found. Of these not all were interviewed, one third no longer used DP and almost 9 per cent refused

the interview for various reasons, but still more than half completed the interview, (see Table 4-1).

2. Bandung is the capital of West Java province, and was the third biggest urban population in Indonesia, after Jakarta and Surabaya. The 1.5 million inhabitants of Bandung are mostly from the Sundanese ethnic group [BPS, 1980: 5].

Bandung eligible respondents were basically selected from the list of FP users of "Hasan Sadikin" General Hospital. From a total sample of 35 addresses, more than three quarters were found. Of the addresses found, almost half were no longer protected by DP, and 1/5 did not agree to be interviewed. In all, only 1/3 of respondents selected completed the interview, (see Table 4-1).

3. Yogyakarta, as a Special Region, has 2.8 million population. Of this number, less than 1/4 live in urban areas. In contrast to Jakarta, the life style of the people is always calm and never in a hurry. They are mostly from the Javanese ethnic group.

In Yogyakarta, two areas were chosen, namely the municipality of Yogyakarta and Sleman regency. This was because, according to the Family Planning Service Statistics Report (December 1984), these areas had many FP acceptors using DP as their contraceptive. Overall, six clinics were visited three times, and on fourth occasion the writer joined the Mobile Medical Team and visited various areas. Nine FP acceptor groups meetings were attended, and door to door home visits were made (addresses gained from FP field workers and clinics). All clinics, Mobile Medical Teams, FP acceptor groups and addresses were chosen at random. From each clinic, 20 addresses were chosen. Other respondents were obtained by following the monthly activities recorded by supervisors of Family Planning Field Workers. Nine supervisors were chosen, four from the municipality of Yogya, and five from Sleman regency. The total eligible respondents for Yogyakarta was 150, and of these 7 per cent of addresses were not found. Of the addresses found, one third were no longer using DP, and one in every ten refused to interviewed. However, still more than half completed the interview (see Table 4-1).

Of a grand total of 355 eligible respondents, 83 per cent were found, but only 53 per cent of respondents completed the interview, as 36 per cent no longer used DP and 10.5 per cent refused for various

reasons to be interviewed, (see Table 4-1). Some reasons for refusing to be interviewed were that they were too busy, or too embarrassed, or because they wanted to keep secret that they used contraception.

Table 4-1: Number of Eligible Respondents and Respondents completed the Interview, DP Users

City	! No of ! eligible resp.	! Found ! N (%)	! Lost to interview ! Refused ! N (%)	! N L Used ! N (%)	! Respondents ! completed the interview ! N (%)
Jakarta	170 (100)	130 (76.5)*	11 (8.5)**	47 (36.1)**	72 (55.4)**
Bandung	35 (100)	27 (77.2)	5 (18.5)	12 (44.5)	10 (37.0)
Yogya	150 (100)	139 (92.7)	15 (10.8)	48 (34.5)	76 (54.7)
T o t a l	355	296	31	107	158
Per cent	100	83.4	10.5	36.1	53.4

Note: *] percentage of all eligible women.
 **] percentage from contacted respondents (found)
 N L = no longer (use of DP)
 Source: Field work study.

A small numbers of providers were also selected for interview, to obtain their opinions on the policies, the services, the side effects of the drugs and how they maintained the activities in recruiting users. They included doctors, midwives, and Family Planning Workers. The doctors were the most difficult to reach, and less than half completed the interview, because they were too busy or they did not want to comment on DP. Some of them arranged for others, such as a nurse, to answer the questions. Finally, 60 per cent completed the interview (see Table 4-2)

4.2.2 Data collection

Respondents were interviewed mostly in their homes, if they permitted it. Interviews were also held in some clinics and Mobile Medical posts when they respondents received their follow-up injections, in Yogyakarta. All interviews were recorded on cassette recorder, and

Table 4-2: Samples and Respondents Completed the Interview, the Providers

City	Doctors			Midwives			FP Workers			Total		
	N	F	C	N	F	C	N	F	C	N	F	C
Jakarta	4	4	1	4	4	1	4	4	4	12	12	6
Bandung	2	2	0	2	2	1	2	0	0	6	4	1
Yogya	4	4	3	4	4	4	4	4	4	12	12	11
Total	10	10	4	10	10	6	10	8	8	30	28	18
Percent	100	100	40	100	100	60	100	80	80	100	93	60

Note: N Number of eligible respondents

F Contacted respondents

C Completed interview.

Source: Field work study (1985)

marked with the respondent's ID numbers only, and not their name. Names were used only to initially locate women in the field.

The languages used for interview were Indonesian, Sundanese and Javanese, depending on the respondent. Respondents who had difficulty expressing their opinions in Indonesian, could chose between Javanese and Sundanese (the interviewer being familiar only with those three languages). It should be pointed out, however, that at the first meeting, their own daily language, Javanese, Sundanese, or Indonesia was used for initial introductions, which made the atmosphere more cooperative and friendly.

The time for interviewing varied from place to place, according to when respondents were free from the major household routines, except for the respondents who were interviewed at clinics, at the Mobile medical post and the acceptors meetings. "Polite refusals" were sometimes difficult to discern, so that in some cases these respondents were visited three times before their intention became clear. Experience in Yogyakarta showed that it was generally easier to contact respondents there, even though the addresses of DP users were obtained mostly from FP field workers. It would appear that women in Jakarta and Bandung, because of their highly mobile life style, are difficult to reach. Interviewing took place during the months of January and February 1985 (a total of 50 working days).

4.3 Results of the study

Those completing the interview were considered as respondents in this study, and were the main focus of investigation. Those who were found but were no longer using DP, were asked the reasons for termination.

Of those who had already stopped, 70 per cent had stopped due to the difficulties of obtaining follow-up injections, almost 10 per cent wanted more children, and only 11 percent had stopped because of side effects. Other reasons for stopping (such as menopause, divorcee, or temporary separation from husband for six months or more) were grouped as "Others", (see Table 4-3.)

Table 4-3: Reasons for Termination

City	no of Respondents	Reasons				
		A	B	C	D	E
Jakarta	47 (100)	36 (76.6)	5 (10.6)	2 (4.3)	1 (2.1)	3 (6.4)
Bandung	12 (100)	7 (58.3)	1 (8.3)	2 (16.7)	1 (8.3)	1 (8.3)
Yogya	48 (100)	32 (66.7)	4 (8.3)	4 (8.3)	2 (4.2)	6 (12.5)
T o t a l	107	75	10	8	4	10
Per cent	100.0	70.0	9.4	7.5	3.7	9.4

Note: (..) percentage

A difficult to find follow up injection

B want another child

C Amenorrhoea

D Bleeding

E Others

Source: Field work study (1985)

4.3.1 Number of injections

As mentioned earlier, this study covered 158 female respondents, protected from pregnancy by DP. The length of use ranged from users who had just received their first injection, up to those with more than 13 injections, as shown in Table 4-4 below.

From this table it can be seen that 3/4 of respondents had been using DP more than one year. They can be grouped as highly motivated users, and can be considered as "stable users".

Table 4-4: Number of DP injections,
according to the length of use at interview

The length in use	! Number of ! Respondents	! Per cent !
1 -- 3 rd injections	41	25.9
4 -- 8th injections	47	29.7
9 - 12th injections	35	22.2
13th and more	35	22.2
T o t a l	158	100.0

Source: Field work study (1985)

4.3.2 The Sources of Information on Depo Provera

The main source of information on DP for more than half the respondents was Health Workers, while Family Planning Workers, who should play the most important role, only informed one quarter of the respondents. Less than one in every ten users gained their information from the mass media.

Table 4-5: The Respondent's Source of Information about DP

No.	Sources.	Number of Respondents.	Per cent
1.	FP Workers	39	24.7
2.	Health Workers	81	51.3
3.	Village Head	7	4.4
4.	Family/ Relative	12	7.6
5.	Mass Medias	13	8.2
6.	Others	6	3.8
T o t a l		158	100.0

Source: Field Work Study (1985)

Below are a few comments from respondents about their source of information:

" I got information on DP after I consulted a doctor. He suggested that method for me, and I tried. I kept using it until now, and this one is the method I like very much. A few time Field Workers (PLKB) visited our house, but they only pushed us to use IUDs. As Moslem women we are not allowed to show our genital organs, except in an emergency. Most Moslems did not accept IUDs for that reasons. Using a contraceptive is not an emergency, we still have many alternatives".

" Before I joined the "Trial Project" I had never heard of DP. I got some information from the newspaper, but mostly they only discussed cancer. The good information I got was from the doctor who offered DP on the trial project. This method suited me, so I continued to use it. Up to now, DP has protected me for almost 4 1/2 years".

4.3.3 The Cost

In this study, the cost is considered from both sides, from that of DP users and that of the Program side. For DP users, the cost is what they have to pay to get the service, and this ranges from nothing to Rp7000 per service. All contraceptives available in the Program were distributed free to every FP clinic, and it was hoped that it would be distributed to users free. But at the service points (hospitals, and health centres) people who asked for any service including DP users had to pay a small amount of money for administrative purposes. This kind of payment varied from one clinic to another, and from one city to another, from Rp150 to Rp499. The Program did not consider this kind of payment as the cost of the drug. Therefore, from the point of view of the Program, the costs of DP can be grouped into: payments from zero to Rp499 which were considered as free of charge; and from Rp500 to Rp7000, considered as the charge of the drug, for services both from government and private outlets. Although the services took place in hospitals or in health centres, if the drug used was not from a Program source, it was considered as a private service. The problem was, not every person knew which drug they used. They only knew that for family planning purposes they may get free services from government hospitals and health centers. Where some people had to pay but others did not, those who paid got angry with the Program, and blamed the Family Planning Program, not the service point.

According to the study, almost half the users gained their DP services "free". In addition, some users reported that the first and second injection was free from the clinic but from the third injection onward they had to pay Rp2000, although they received the service in the same place as before (see Table 4-6.)

Table 4-6: The Cost of Depo Provera

C o s t	S e r v i c e s				T o t a l and (Per cent)
	Government	Private	DR	MW	
	M.M.T	Clinics			
Rp 0. - RP 0.	6	30	-	-	36 (22.8)
Rp50. - Rp499.	-	39	-	-	39 (24.7)
Rp500. - Rp999.	-	9	-	-	9 (5.7)
RP1000. - Rp1999.	-	14	-	8	22 (13.9)
Rp2000. - Rp4999.	-	26*	21	4	51 (32.3)
Rp5000. - and +	-	-	1	-	1 (0.6)
T o t a l	5	118	22	12	158 (100.0)

Note: M.M.T = Mobile Medical Team

DR = Doctors

MW = Midwives

*) They received the injection before the Program adopted DP, and still paid that amount up to the time of interview.

Source: Field work study (1985)

"I received a DP injection while I gave breastmilk to my baby. Since the third injection I have had to pay Rp2000 each injection. The midwife always says "no more DP stocks from the the Program, so if you need it, you have to pay".

Some users also reported that they had paid for their injection since they began using it. They started before the Program distributed DP in 1980 when it was not available in the Program, but they received the service from the clinic which currently also gives free services to new DP users. For the "old" users, the "old game" is still going on.

"I have used DP since 1980 up to now, and the cost of each injection has ranged from Rp3000 to Rp5000. Recently I saw that the Health Centre (where I got the service) offered DP to new users free of charge. I asked, why do I have to pay, while another users do not. The answer was, You were the old users, you already used DP before we got the drugs from the Program. Up to now you were using the drugs from private channels, so you have to pay. I would move to another health centre for the next injection, and I would tell them that I am the new user".

Other users explained that they have to pay after the eighth injection. These users were involved in the DP trial project launched in 1980 until 1982 (eight injections). When the project was over, the users had to pay as they then received the service from a private doctor.

"Last month should have been my fifteenth injection, but I did not take it. I did not have enough money to pay for the drug. This has happened a few times, since free injections have finished. Starting from the ninth injection, I have to pay Rp3000 each".

4.3.4 The Source of Depo Provera Service

Before the Program distributed DP throughout the country, DP were already available in private services from doctors and midwives, who obtained the drug from commercial channels, users had to pay for services from these channels. This study found that 118 respondents, or 3/4, gained their first service from FP clinics, while 14 per cent and 12 per cent respectively obtained their first service from private doctors and private midwives (see Table 4-7).

Table 4-7: The Source of First and Last DP Services for the Respondents

No.	Place of Services.	Number of Respondents.	
		First service	Last service
Program Sources			
1.	FP. Clinics	118 (74.7)	128 (81.0)
2.	Mobil Medical Teams	6 (3.6)	8 (5.1)
Private Sources			
3.	Private Doctors	22 (13.9)	10 (6.3)
4.	Private Midwives	12 (7.6)	12 (7.6)
T o t a l		158 (100.0)	158 (100.0)

Note: (..) percentage.

Source: Field work study (1985)

Four fifths of respondents received the follow-up from FP clinics, less than 1/10 from private doctors and private midwives, and 5 per cent from mobile medical team (Table 4-7).

Some respondents said that they moved from private services to the health centre after they heard or saw that DP was offered there. The reason was that they could have the same service for a lower price or totally free.

"Previously I received DP injections from a private doctor. It cost me 7000 rupiah each. Three months ago I heard that the Program offered DP at no charge in the Health Centres, so I moved in to Puskesmas. I was really happy, besides the service is not so different from a private doctor, it saves a lot of money".

4.3.5 Reasons for choosing Depo Provera

From Table 4-8 below, it is apparent that over three-quarters of respondents chose DP as their contraception for reasons such as "I like it, because it is practical". It can be assumed that they were fully aware that DP was the best contraceptive for them after comparing it to others.

Table 4-8: The Reasons for Choosing Depo Provera

No !	R e a s o n s	! Number of	! Per cent
!		! Respondents	!
1.	I like it, practical	123	77.8
2.	I cannot use others	9	5.7
3.	Suggested by some one	22	12.9
4.	Others	4	2.5
T o t a l		158	100.0

Source: Field work study (1985)

The users in this study, however, chose DP mostly after they had experience with other methods such as IUDs, pills and condoms. From Table 4-9, it also can be seen that almost three-quarters of respondents chose DP after using another method. DP was the second method for 58 per cent, and the third method for 14 per cent of respondents.

Table 4-9: Methods use before using DP

Number of Methods Use	! Last ! Use	Methods Used Before DP				! T o t a l	
		IUDs	Pills	Condoms	Others	Resp.	%
No	!						
Other	!	45	0	0	0	45	28.5
One	!						
Other	!	0	25	38	26	91	57.6
Two	!						
Others	!	0	5	13	4	22	13.9
Total	!	45	30	51	30	158	100.0
%	!	28.5	19.0	32.3	19.0	1.3	100.0

Source: Field work study (1985)

"I never used any contraception before. After I delivered my third son, the doctor suggested I have an injection contraceptive because I was nursing my child".

"I live with mother and father-in-law, they want me to have five children. After my third child, I began to consider having a rest for a few years. The best method I could chose without the knowledge of my family was DP. Today I will have my fifth injection. I am quite happy with DP. So far, I have not suffered any side effects, and my family still does not know about it". (we met her in a health centre)

"After I had discussed it several time with my husband, at last we chose DP. A lot of neighbours in this block (Armed Forces housing blocks) use DP. So I tried it after a long discussion with a doctor. For almost 6 months, I suffered irregular menstruations, but since the fourth injection, I have lost my cycle completely. My husband and I are very happy with that situation".

"I used an IUD following the birth of my first child. Three months later I had heavy bleeding, so I moved to pills. I passed one year safe and sound, but after that, sometimes I forgot to swallow the pills, and this is the "result"(she pointed to a 3 years old boy). I have received injections since this boy was one month old".

It seems that DP was already popular in the areas under study. Respondents said that they were happy with DP because it had more advantages than other methods. That almost three-quarters had used DP

after trying one other method or two other methods, indicated that DP was used by respondents after they had compared it to other methods, and reached the decision that DP was the preferred method for them. As remarked by Robert A.Hatcher [1978: 215] "DP has its own population".

Furthermore, the comments from the women indicated that the availability of DP services in the National Program at least filled the gaps left by other methods, and gave strong support to the Program's achievements. As Potts [1978: 9] observed, more methods available means more choices, and more people will join the program.

4.3.6 Depo Provera and Nursing mothers.

This study also tried to collect respondents opinions about the effects of DP on breastmilk. Although those opinions came from mothers with no medical background, their responses can be viewed as one of the "push" factors encouraging use of DP.

Of 158 DP users covered by this study, three-quarters breastfed their babies while using DP. More than half said that the breastmilk was "as usual", meaning that the volume of breast milk was the same as before they used DP. One fifth of mothers said that their breastmilk was better than the previously when they did not use any contraception. The rest could not give any opinions about it, because they did not remember or they did not notice, and no one reported adversely (see Table 4-10).

Table 4-10: Respondents who Breastfed and Their
Opinions about the effect of DP on Breastmilk.

No.	Lactating mothers.	Respodentts.	Per cent.
1.	Yes	118	74.7
2.	No	40	25.3
T o t a l		158	100.0

Mother's Opinions

No.	Opinions.	Number of mothers.	Per cent
1.	As usual	70	59.3
2.	Better	26	22.0
3.	Do not Know	22	18.6
T o t a l		118	100.0

Source: Field work study (1985)

4.3.7 Regularity of Taking Follow-Up Injections.

Because a dose of 150 mg of DP is injected intramuscularly every three months, users have to take follow-up injections four times a year to keep a safe level of protection from pregnancy. All users get this information clearly before they use DP for the first time. Table 4-12 shows that almost 2/3 of the respondents did not follow a regular schedule in taking their follow-up injections. More than half were 1 to 2 weeks late, and 12 were 3 to 4 weeks late. The main reasons for this was not laziness or shortage of drugs in clinics, but rather lack of money to purchase DP or pay the service fee. If the date for follow-up came, and at that time they did not have money, they postponed the injection until they had enough money. Being highly motivated in planning their families, those that postponed were fully aware that if they did not use any method during the "empty" (unprotected) period, there was a chance that they would get pregnant. To avoid unwanted pregnancy they used other methods: one-third of respondents used condoms, more than one-fourth used pills, and another one-fourth avoided having intercourse. Only a little more than one-tenth of respondents did not use anything to protect themselves from pregnancy. Table 4-11 has details of the substitute methods used.

"I have used DP for 3 years. The first year I paid Rp3000, then Rp4000, and now, I have to pay Rp5500. When the date to take the follow-up came and I did not have money, I would asked for pills. I took the pills regularly until I had enough money for another injection."

"I have used DP for four years. some times I did not take the follow-up regularly. I was not lazy or forgetful, but the main problem was I could not afford Rp5000 at that time. When this happened, it means that we (respondent and her husband) had to use separate bedrooms, and I locked my bedroom door at night"

Table 4-11: The Regularity of Follow-Up Injections, and Substitute Methods Used

No Taking Follow-up	Number of Respondents	Substitute Methods			
		Pills.	Condoms.	Avoid intrc.	Nothing.
1. Late 1 - 2 Weeks	80	23	29	19	9
2. Late 3 - 4 Weeks	12	3	2	4	3
Sub Total	92	26	31	23	12
3. Never Late	66	--	--	--	--
T o t a l	158				

Source: Field work study

4.3.8 The Objectives in using Depo Provera

As mentioned in Section 3.4, the objectives for using contraception can be categorized as spacing and stopping child bearing. Table 4-12 shows that more than half the respondents in this study used DP for spacing, and 41 per cent for stopping. Furthermore, the Table also shows that respondents who already had 3 or more children are more likely to stop, and the more children they have the more they want to stop. Respondents desiring to space families, showed the reversed pattern. In addition, as stated in Chapter III, in Indonesia DP is only available from official outlets for women with 2 children and more, so no respondents had no children at all. In Table 4-12 the few respondents with one child probably obtained the service from private channels.

Table 4-12: The Objectives of using Depo Provera according to Parity

Parity	! Stop. ! %	Space. %	F.Welfare. %	D. Know. %	T o t a l. % N	
0	0.0	0.0	0.0	0.0	0.0	0
1	33.3	66.7	0.0	0.0	100.0	6
2	18.7	56.2	18.8	6.3	100.0	16
3	27.9	65.1	4.7	2.3	100.0	43
4	42.9	57.1	0.0	0.0	100.0	35
5 +	61.4	38.6	0.0	0.0	100.0	44
N.A	35.7	57.2	0.0	7.1	100.0	14

Note: N.A = No Answer/ Not stated.

F. welfare= family welfare

D.know = do not know

Source: Field work study (1985).

4.3.9 The Side Effects of Depo Provera

Most women experienced some menstrual cycle disruptions, including lost of cycle (amenorrhoea), irregular bleeding and spotting or change in frequency, duration, and amount of blood loss. Table 4-13 shows these four types of menstrual disruption were suffered by four-fifths of the respondents, with almost half experiencing amenorrhoea, almost one-tenth spotting, and one-fifth suffering irregular menses. Only a few had heavy menses.

"This respondent used DP for almost 4 years (16 injections). She told us that the first 5 months after receiving DP injections was the "hard" period for her. She suffered headache, irregular menstruation and two months spotting. After the third injection, everything improved, no more headache and no spotting. After the 8th month of injections she lost her cycle (amenorrhoea). She was not afraid, she asked for a pregnancy test every three months (before she had another follow-up). If she wanted her cycle back, she was told it was easy, just stop injections and use pill contraception instead.

Table 4-13: The Length of Use and Side Effects Experienced.

Duration in Use	S I D E E F F E C T S								Total	Per cent
	Ame- norr- hea	Spot- ting	Heavy mens.	Irr. mens.	Incr. weight	Head ache	Ner- vous ness	Oth- ers		
1--3rd	17	7	-	10	2	3	-	2	41	25.9
4--8th	23	4	1	12	6	-	1	-	47	29.7
9-12th	16	-	3	8	7	-	-	1	35	22.2
13--up	18	3	1	5	7	-	-	1	35	22.2
Total	74	14	5	35	22	3	1	4	158	100.0
Per cent	46.8	8.9	3.2	22.2	13.9	1.9	0.6	2.5	---	100.0

Source: Field work study(1985)

When the regular cycle became normal again, then she went back to injection. She and her husband were quite happy with DP".

4.3.10 Tolerance to Side Effects

To determine the tolerance of users to side effects, the study solicited information from providers, especially doctors and midwives, as well as from DP users themselves. As pointed out above (Table 4-13) the most important side effect was menstrual disturbance. But why did they continue to use DP if there were side effects? More than half the respondents had used DP for more than two years. one doctor from a health centre in Yogyakarta said:

"Surprisingly enough, if properly managed, the disordered bleeding (spotting, heavy menstrual periods, and irregular menstrual periods) was well accepted by women who have been adequately prepared for it in advance. Here (the health centre) we have almost 1000 DP users (985 users), who never drop out except if they want more children".

The explanation reported by many providers was that spotting was considered as normal menstruation, and it did not bother users. It occurred only for a few months, and was replaced by amenorrhea, and

heavy menstrual bleeding did not occur every month. Only 5 respondents (3 per cent) experienced heavy bleeding, and if they reported these side effects to clinics, they were treated properly. One doctor from a health centre in Jakarta reported:

"For heavy bleeding, we give them an extra DP injection to control the bleeding, two weeks after the first (previous) injection, and several tablets before it. This extra injection of DP is to hasten the atrophy of the endometrium, and will then produce amenorrhoea."

The users also gave reasons why they accepted DP in spite of its disadvantages:

"For me, as a farmer's wife with a hard life and hard work every day, I prefer DP. Two years ago I used an IUD, but as you know, the IUD is not suitable for hard working women. Besides that I feel very shy when I have to take follow up control. Since I received injections (2.5 years ago) I feel more healthy, and I can pray every day without being bothered by my cycles", (Moslem women have to postpone their religious activities when they are menstruating, and the activities which were postponed must be done later beside the daily religious tasks).

Irregular menstruation means changes in the menstrual pattern, and times when the cycle is unpredictable. For these side effects, a doctor explained:

"They get extra oral pills, which they have to use until their menstrual patterns is normal again. Most women still pointed out that the advantages of complete protection for a three month interval may outweigh the apparent inconvenience of using both oral medication and injection. Furthermore, the women who failed to take their oral supplement do not increased the risk of pregnancy as does the women who failed to take an oral contraceptive tablet".

While amenorrhoea, which was experienced by almost half the respondents, may cause some women concern, reduced blood loss might have the beneficial effect of reducing the chances of developing anaemia. Undernourished women will benefit from amenorrhoea [Cautinho, 1978: 79].

"I believed to my doctor, although I lost my cycle for almost 1.5 years. If the doctor still says okay, I will continue to use DP, because my body does not feel peculiar but feels normal".

Most of the respondents in this study were Moslems, and the Moslem women were not distressed by amenorrhoea. They were not interrupted in

their daily prayers, fasting in the fasting month, haj pilgrimage or other religious activities. Most husbands were also happy with those conditions, because they could have sex whenever they wished. As Moslem women are prohibited from sex during menstrual cycles, husband gave strong support to using DP continuously.

Cautinho [1978: 80] noted that menstruation was not seen by women as something desirable. If they did not have to bleed while remaining healthy, it was like being pregnant without a baby, and they were happy with the concept of amenorrhoea.

Increased weight was considered by most women who suffered it not to be one of the side effects of DP. They were happy with weight gain, because it was viewed as healthy.

As mentioned above, all the advantages may outweigh the apparent inconvenience of using DP, or in other words, the respondents were highly tolerant of the side effects, because of the perceived advantages. From Table 4-14, it can be seen that most women in this study still wanted to continue to use DP for several months, and almost 2/3 of respondents would continue for 25 months and more.

Table 4-14: Intention to Continue DP use according to reported Side Effects

Continue till	S I D E E F F E C T S									Total	Per cent
	Amenorrhoea	Spotting	heavy mens.	Irregular mens.	Increase weight.	Headache	Nervousness	Other			
0-- 6mts	11	3	1	2	2	1	-	-	-	20	12.7
7--12mts	4	3	-	2	-	-	1	1	-	11	7.0
13-18mts	10	-	1	2	-	-	-	-	-	13	8.2
19-24mts	9	-	-	8	1	-	-	1	-	19	12.0
25 and +	40	8	3	21	19	2	-	2	-	95	60.1
Total	74	14	5	35	22	3	1	4	-	158	100.0
Per cent	46.8	8.9	3.2	22.2	13.9	1.9	0.6	2.5	-	100.0	

Source: Field work study (1985)

4.3.11 The Continuation of use

The continuation of use of DP in this study was apparently very high, as can be observed from Tables 4-13, 4-14 and 4-15. Table 4-13 shows that 74 per cent had used DP for one year and more and 44 per cent for more than two years.

Table 4-15 shows that three-fifths of the respondents wanted to continue to use DP for 25 months and more. More than half of these had already had 9 or more injections, which means they already had used DP for 2-3 years and they still wanted to continue for at least two years more. Although, this was not the perfect measurement to evaluate the continuation rate of DP, at least it proved the high popularity and acceptability and respondents preference in contraceptive methods. It is safe to say, however, that DP gained its own "followers" from the other methods available.

Table 4-15: The Intention to Continue to use DP
According to the duration of Use

Duration of use (number of injections)	0 - 6 months	7-12 months	13-18 months	19 - 24 months	25 and + months	Total
1 - 3 rd	8	5	3	7	18	41
4 - 8 th	4	4	7	3	29	47
9 - 12 th	4	1	2	4	24	35
13 and +	4	1	1	5	24	35
T o t a l	20	11	13	19	95	158
Per cent	12.7	7.0	8.2	12.0	60.1	100

Source: Field work study (1985)

4.4 Discussion

Every Family Planning Program has two important tools, the Information, Education, and Communication (IEC) and the clinical and outreach services. The IEC generates the demand for contraceptives and the services meet that demand. Obviously, these very important tools influence the popularity and the acceptability of every method available in the Program. In the areas under study, these mechanisms significantly played a special role in the performance of DP. As already mentioned, DP was the newest contraceptive incorporated into the Indonesian FP Program. Heated debate followed its rejection by the FDA in 1978, and this news made DP unpopular in Indonesia for a few years around 1980, especially to women in the upper and middle classes. The situation became worse, because the Program did not provide enough information and did not promote this drug intensively. That is why, until recent years, only a few women knew that this kind of injectable contraceptive was already available in the Program. This phenomenon can be detected from Table 4-5 and the issues discussed in some newspapers in Indonesia :

"We are familiar with the contraceptives which are available in the Program such as IUDs, pills, and condoms. But currently I heard that those who failed with these contraceptives may obtain an "injection". Is that "injection" a new kind of contraceptive method ?". [Pelita, 28/2/1981: 4]

The lack of information not only affected ordinary women who had never used any contraceptive, but also the users themselves did not get proper information. The question below appeared in Poskota Minggu, which is the popular newspaper in the Capital of Jakarta:

"I have used the injectable contraceptive Depo Provera for 6 years. I was 39 years old, when I had to stop this contraceptive. Is it true that DP users become infertile? I worried so much because I totally lost my cycles in the last two months". [Poskota Minggu, 24/3/1981: 10].

After several seminars and field trials, the NFPCB started to distribute the drug widely in 1982. However, the motivation and promotion still lagged far behind that for other methods, probably because the providers were still affraid of suspected side effects and limited stocks of the drug. The community as the target of Information,

Education, and Communication (IEC), still received much less of the basic information than it should have. Many questions sent to Pelita and Berita Yudha newspapers, asked for this basic information. These letters came from many provinces all over Indonesia. Basic questions included:

- "Was the injectable contraceptive not dangerous for the users ?".

[Pelita, 9/1/1982: 4].

- "Was the injectable contraceptive available in dispensaries (commercial channels), and what is the name of this contraceptive?".

Was the injectable already approved by Islamic leaders ?".

[Berita Yudha, 24/1/1982: 3].

Besides that, up to the end of 1984, it seems to the author that this contraceptive was provided only for some "selected" women. It was not made available for every woman who needed it. This new contraceptive was provided free of charge for women who had failed with other available methods, women who had never used or refused to use other available methods and women who used condoms, other barrier methods and traditional methods.

In addition, DP is not considered as a long-term contraception by some decision makers in the Program, because it needs another injection every three months. It was hoped that DP users would be easily motivated to use an IUD later, (this contraceptive is considered as a "permanent" one, as it can be used for two to six years). Those policies were not written, but were expressed verbally by the Program leaders from the central office down to the provinces. An interview with Program leaders and newspapers confirmed the above impression, as can be seen below:

"We provided injectables for supplementary contraceptive purposes. This year (1985) DP will account for around 15 percent of all contraceptive methods made available by the program".

"We selected the areas before we sent DP to the field. The "hard" areas (the areas where most women still refused to use any contraceptive), and condoms areas (the areas where most FP acceptors used condoms) were our priorities".

These policies are also apparent in the newspapers. One family planning leader from the Implementing unit said:

"Everyone should remember that the injectable contraceptive was used as temporary contraception, and users must be directed to use a permanent contraceptive as soon as possible. This method is costly and needs a follow-up every 3 months, that means we have to provide a lot of health personnel to cover it. I was afraid that it would be difficult to meet the demand due to the lack of health personnel". [Suara Merdeka, 23/4/1983: 8].

This statement pointed out that thus providers recommended to use only IUDs which can be used for 2-5 years. It is considered to be inexpensive and does not need services every few months.

Furthermore, the statement below showed the limited distribution caused by the "selected area" policies.

"Fourteen Ulama (Islamic religious leaders) from Aceh province made a visit to the Head of the Program at central office in Jakarta. The main request of these Ulamas was, the improvement of DP stocks in Aceh province. There were many women who refused to take part in the Program due to the lack of this method at the service points". [Pelita, 3/6/1982: 2].

The field work study showed that the above policies (area priorities; considering DP as a temporary contraceptive and re-motivated DP users to use IUDs) did not work as hoped. As seen in Table 4-9, women who could not use other contraceptives but used DP comprised only 6 per cent of the respondents. Also, as noted in section 4.3.2, the first source of information about DP for more than half the respondents were health workers, and not family planning workers. This indicates the weakness of this source.

This method was first used in Indonesia by doctors in their independent clinical studies, then continued during the trials project period. These two periods were almost ten years long, (1970 - 1979/1980), and health personnel, especially doctors accumulated strong and reliable information about DP (see section 3.2) However, not many married women in the reproductive ages (MWRA) were well informed about this method. Rural agrarian women, who comprised most Indonesian MWRA, were still far from grasping this method. Rural women are mostly uneducated and unfamiliar with medical personnel, and thus they very rarely ask for treatment from health centre. In addition, many rural people live far away from the health centre.

If DP was aimed at women who used condoms or other less efficient methods, as was hoped, the results of this objective were not satisfactory. Only 19 per cent previously used condoms and then changed to use DP, and the percentage changing from the IUD (which was considered a permanent contraceptive) to DP was also 19 per cent. Most women who chose DP in this study had previously used pills, 32 per cent (see Table 4-9. Altogether, more than half the respondents moved to DP from methods which were considered by the Program officers as "stable methods" IUDs and pill.

From the above facts it can be concluded that controversy surrounded the implementation of DP as a contraceptive, at least in the areas under study. On the one hand, DP was used by the Program to recruit women who still refused to join the Program. The candidates recruited with this contraceptive, were to be motivated to use other "stable" methods (especially IUDs) later. On the other hand, the IEC did not spread knowledge of DP to every woman equally. This was probably because of the USFDA decision eight years earlier, which still influenced Indonesian Family Planning Officers.

4.4.1 The Role of the Services

Most women in this study received their supplies of DP from FP clinics. Three quarters obtained their first service, and 81 per cent obtained their last service from clinics (see Table 4-7 and 4.4), but most were not satisfied with this kind of service, especially users who had to pay. Most women in Indonesia know that when provided by the Program, IUDs, pills, condoms, available in clinics can be obtained free of direct charge.

For DP users that rule did not apply. Three in every four respondents receiving services from clinics had to pay, while other users received their DP totally free of charge (around 1/3 respondents). That is why many DP users dropped-out after several injections or changed to other methods (see Table 4-6).

".....the FP acceptors among the grassroots level farmers, asked the Program to give them DP totally free of charge",
[Kedaulatan Rakyat, 3/4/1981: 4].

"DP users from one health center complained and postponed their follow-up injections, because the cost of DP services was raised from Rp500 to Rp2000", [Pelita, 8/3/1984: 5].

The field interviews recorded the same phenomenon.

"I had to pay for my injection after the second follow-up. The midwife in my Puskesmas said that there were no more stocks of DP from the Program".

"I postponed my follow-up injection several times, until I saved enough money to purchase it. I used condoms for supplementary contraception".

"I got my DP when the Puskesmas launched the trial project. Free service finished after eight injections (the end of the DP trial project). I paid Rp3000. each for the last three injections. When the date came for follow-up and I did not have money, I did not go to the Puskesmas. To avoid pregnancy, I slept separated from my husband or we practiced withdrawal".

About delaying taking the follow-up injection a doctor said:

"If users postpone the date of the follow-up injection, they ruin the cycle of injections. The drug may not give proper protection. The cycle of injections has been planned since the first injection".

Furthermore, Powell and Seymour [1971: 37], found in their study that some users who were 2 weeks late receiving their fifth injection, conceived. This demonstrates the short time after the 3 months of protection that ovulation may occur.

In addition, another study found the same cases, caused by the cost of the drug in Jakarta, during the Oral Contraceptive Study, they found current use of injectables lower than of pills. They suspected this was caused by the Program limitation of the number of injections that acceptors could have free of charge. In 1980 it was 8 injections, and in 1983/1984, only 4 free injections from Program sources. They also pointed out that acceptors could drop out or continue on injectables through private sources (if they have to buy with the same cost, they preferred to go to the private sources) and their continuation would not show up in the Program service statistics [Lubis and Prihartono, 1984: 6].

The above discussion explains why DP was slow to become popular, and the continuation rates were relatively low (see Section 3.4 the results of the Modular survey, compared to the same study in Thailand.) If the information (IEC), the policies, and the services for DP had been equal to those for pills, DP might have become the "method of choice " very soon, because the advantages are greater and the popularity of injections are greater than that of pills, which are currently the method of choice.

4.5 Summary of the Field Work Study

The aim of this field work study was to assess the acceptability of Depo Provera to Indonesian women, especially in the areas under study. The number of respondents who completed the interview was very small compared to the population or the family planning acceptors in the areas under study. However, the results still can be used to gain a general impression of program operations.

As Malcolm Potts observed, when a new method (such as DP) is added to the program, there is some degree of substitution with other methods and some fresh users who were not satisfied with any of the options previously available [Potts, 1978: 235]. Thus, DP users in this study compriced some fresh users (who never used any contraception before) and some who switched from IUDs, pills and condoms. It was therefore not fair for the Program to adopt a policy that DP be provided only for the women who refused to use other methods previously available or who failed from those other methods. It should available for every woman who need it, free from direct charges (as are other contraceptives provided by the Program). DP would help the Program offer more choices to eligible couples, and gained more acceptors.

Family Planning is about choices; choice of when to bear children, choice of how many children to have, and choice of; what methods. It is the most intimate and in some ways important part of any couple's decision. Philosophically, method of contraceptives is a choice offered to couples who make thier own evaluation and then choce the method suitable for them. Based on these reasons, again, it is seems not fair for Indonesian providers to consider DP as a "temporary" contraceptive,

and decide that the users should be remotivated to use other methods (which were considered as "stable methods"). Beside showing lack of appreciation of the couple's/ women decision in choosing a contraceptive method, these policies lacked a sound basis. The issue of a lack of medical personnel was not completely true, because, if a women returning for an injection has no complaints, her visit last only in 60 to 90 seconds. This includes time for a short interview with a doctor or midwives, paper work, and the injection itself [Rinehart, 1975: K-12]. From this one may calculate how many users can be served in one day's work. Furthermore, the injection services can be operated on a once every-three-months schedule, as it is only a matter of planning and maintainning the service to meet the demand.

The results of this study showed that 60 per cent of respondents still wanted to have 25 months protection from pregnancy in addition to the time they have already had. While 44 per cent of respondents who had already had a 9th to 13th injection at time of interview, reported that they wanted to continue 25 months more. This proved the highly acceptability and challenging prospect to the Program. It also proved, if properly managed, DP would easily become a "stable" method in the Program, as shown by Chiang May program (Thailand) and Gunung Maria program (private services in Tomohon, North Sulawesi, Indonesia). In these two program DP was the most popular and the continuaty was on a par with IUDs and Pills, [Baldwin, 1978: 304; Barten, 1984: 7].

The acceptability of DP to respondents of this study was also apparent in the following findings.

1. Although the greatest obstacle was the cost of the drugs, and most respondents postponed thier follow-up injections for that reasons, still, they did not drop-out. They used other methods or did something to avoid pregnancy, during their period without DP. These respondents would have another injections, when they had enough money to pay for the service.

This "irregularity habit" of follow-up injections, influenced the continuation rates figures of this method in the statistical report recorded by the Program. This was because users who did not have another injections more than ten days after the three months period, were reported as dropped-outs. The old users who came back after several

weeks, were reported as new users to the central office. This may be one of several factors caused the continuation rate of DP in the Program to appear relatively low, far below that of pills.

2. This study found that more than half of the respondents had used other methods some time in the past, and at the time of interview they used DP, more than three-quarters had used DP for one year and more. This probably indicates that the selection of this method by the women/couples was mostly through evaluation, comparison and consideration, and the decision was most likely a solid decision, not just "follow the leader".

3. The respondents also pointed out that they could tolerate the side effects they experienced. It appeared that they easily managed the bleeding problems (irregular, spotting and heavy bleeding), while most women were happy about the most common side effect, amenorrhoea. As Moslem women cannot perform their daily religious duty during menses they welcomed the cessation of this monthly interruption. Also, respondents who suffered from or expose to anaemia benefitted by avoiding loss of blood, while others benefitted because their breast milk was not suppressed.

Injected medications have been popular in Indonesia for a long time. This popularity stems from the yaws campaigns in the 1950s. The nature of administration of DP may have an appeal, and is culturally acceptable to both educated and uneducated rural women, and Moslem women as well. If the motivation and information about this drugs spreaded out openly to the grassroot level, and the back-up services within the grasp of all women (the cost and the logistics), the results of this study suggest it would not be difficult to bring DP up to par with IUDs and pills in Indonesian Family Planning Program.

The interviews with weomen have convinced the outhter that the providers have miss treated DP as a method of contraceptive in the Program. They provided DP only for selected women, which means they did not make use of DP as an attractive model of ideal contraception which could play a very important role in the family planning program. The difference in the costs for each woman and for each service point confused most users. Eventually they blamed the Program, considering that the Program did not treat them equally with the users of other methods.

CHAPTER 5

SUMMARY AND CONCLUSION

Worldwide evidence is mounting that DP is a satisfactory contraceptive with several advantages and some disadvantages and its problems are now comparable to those of other methods. The discussions in the Asian Workshop on Injectable Contraceptives in 1978 and of the Multinational Comparative Studies in 15 countries under WHO coordinations (Special Program of Research Development and Research Training in Human Reproduction, Task Force on Long Acting Agents for the Regulation of Fertility), indicated that the usage of DP as a contraceptive is being carefully monitored, [Benagiano and Fraser, 1981: 506]. The results of the present field work reflect those of other studies which suggested that for most women, disruption of the menstrual cycle, the major side effect, is not a health hazard. Women everywhere have shown themselves quite capable of choosing whether or not the advantages of the drug can overcome the suspected disadvantages. It is unlikely that a single contraceptive which will safely, conveniently and effectively meet every body's contraceptive needs will be found. Currently available contraceptives do not meet the birth control needs of all women.

There are real problems with each of the contraceptives that are currently available. Before the Program adopted DP in 1980, operationally there were only three main methods in the Program; IUDs, pills, condoms. Foam and vaginal tablet were not popular. Besides being inconvenient, supplies were very limited. Sterilization was less popular because of Moslem leaders, disapproval [Hull, et al., 1977: 19], and up to now is still on clinical trials. The three main methods available in the Program, also were unpopular for various reasons. The moderate choice is the pill which is easy to obtain supplies and simple to use,

so it is not surprising that the pill is the method of choice in the Program.

The present study found that the decision to adopt DP in the Program was based on the contraceptive's attributes and the problems of service provision encountered in the field, that still many women refused to use contraceptive provided by the Program. The experience from world wide use convinced Indonesian Family Planning decision makers that DP is more or less equal with IUDs and pills.

As an independent nation, Indonesia should make its own decision concerning contraception without following other countries or the USFDA. DP as a contraceptive is culturally acceptable to most women in developing countries and to Indonesian women as well. Therefore, it is correct, that Indonesia included DP in the family planning program, because the demand from the women had rose since 1973 [Barten, 1976: 9].

The findings of this study suggest that Indonesian women were highly tolerant of the side effects, and used it for a considerable time. However, the cost of the drugs, the service, the poor information and motivation and limited logistics prevented it from reaching all women who needed it, (see discussion in section 4.4, chapter IV). An effort to reach poor and uneducated people in rural areas was made by the Program, but there were differences in the availability of information and services and differences in the cost between places, even within the Program's clinics. The use of contraceptives (especially DP), may have been influenced by access to information and available services and the capacity to bear the cost. The providers, it seems, concentrated the information services on pills and IUDs rather than DP.

The results of the field work study suggest the main obstacle which made the continuation rate of DP relatively low, even worse than pills, was the cost of DP at the service points. Perhaps if the Program could make DP totally free in every family planning clinic, and if the supplies of the drug met demand, the performance of DP in the Program would show its real potential. For this to come about, many policies and actions in the Program should be altered. For example, DP is aimed mainly at women who have refused to use other contraceptives available in the Program. The second target for DP were the women who used condoms or other methods considered by the Program as ineffective. Results of

field study pointed out that more than half of respondents (70 %) used another methods before chosed DP, and 50% were ex pills and IUDs users. DP was available only for women who had completed their families or at least had two children. This policy no longer has any strong rational reasons, as it is based on an old theory that DP permanently impaired the fertility of users. Current data show, its reversibility is comparable to pills and IUDs (see section 2.7).

It was also considered that DP was a "temporary" contraception, and the users should be remotivated to use IUDs. This policies would also need to be reversed, as the old rationale no longer applies. The results of this study suggest that the effectiveness, the pregnancy rates, and the reversibility of this method is equal to IUDs; in some programs, even better. Results from field work also supported this. DP even became a preferred method for most Moslem women which to Indonesia is a benefit as 2/3 of MWRA of Indonesia are Moslem. It seems reasonable to give DP a chance to realize its potential to become a method of contraception used by women for a considerable time.

The special benefit of DP to the Program was that it made it possible to use Mobile Medical Teams on a 3 months schedule. This saves a lot of medical personnels and expenditure. Also, by 3 monthly schedules, it is possible to reach remote areas such as Kalimantan, Maluku and Irian Jaya, with less problems in following-up. This action could open a new era, and the Program could reach people in remote areas. The Program could also serve all Indonesians who live in any areas of the Indonesian islands. By increasing the use of DP, errors in monthly Service Statistical Reports could be reduced as they are usually caused by estimations of the usage of pills and condoms.

With these improvements, perhaps, it would be easier for the Program to maintain the achievement levels. Properly managed DP can accelerate the demand for modern contraceptives in Indonesia, and contribute to the goals of reducing fertility and improving the quality of life of the Indonesian people.

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APPENDIX A

THE OPPONENTS AND THE SUPPORTERS ARGUMENTS
 ABOUT DEPO PROVERA AS A CONTRACEPTIVE.

The Opponents Arguments	The Supporters Arguments
<p>1. Studies in beagle dogs have shown an increased incidence of mammary carcinoma associated with DP</p>	<p>1. The worldwide usage, trials and studies of DP injectable contraceptive totalled more than 6 million women years (at 1978). Experience had not suggested any increased risk of breast cancer in women using this drug. [Upjohn, 1978: 253].</p>
<p>a. The safety questions raised by the animal data have not been resolved.</p>	<p>Estrogen, which is used in most Oral contraceptives, has been associated with mammary cancer in mice and other tumors and cancers in various species (rabbits, mice, guinea pigs, monkeys) but those contraceptives were approved [Upjohn, 1978: 254].</p>
<p>b. Accordingly, the FDA still views this drug as posing a substantial risk to potential users.</p>	<p>The findings in beagle dogs were not relevant to women [Briggs, 1977: 278; Potts, 1978: 235]. With than 15 years of experience there have been no known fatalities related to DP administration in humans [Benagianò and Fraser, 1978: 504].</p>
<p>c. None of the approved contraceptives demonstrate these findings. [FDA, 1978: 252]</p>	<p>Studies in humans have not shown any increase in breast tumors or cancer [Kane, 1983: 74].</p>
<p>Malignant tumours and other breast pathologies occurred in conjunction with endometrial disease, even on low doses of DP. Some of the mammary tumours in beagles were similar to those found in humans. The drug also induced diabetes and hyperlycemia [Minkin, 1980: 53].</p>	<p>No data from adequate studies have shown any effect on the risk of neoplasia [WHO, cited in Maine, 1978: 343].</p>

2. Since 1973-1974, when the FDA was willing to approve, it has concluded that in the US,:
- a. There was no definitive evidence of a significant patient population needing the drug, and for any existing population the risks outweighed the benefits
 - b. There was less evidence of demand from physicians or patients for this drug.
 - c. Availability of many safe, effective alternative methods, has decreased the need to used DP.
 - d. Because of these factors, the Upjohn Company would not be able to acquire enough patients to complete post-marketing studies within a reasonable time.
 - e. The FDA recognizes that benefit/risk considerations may be different in other nations.
[FDA, 1978: 266].
3. Physicians were likely to administer estrogens to control irregular bleeding induced by DP. This would impose an added risk factor and would decrease the benefits of a contraceptive made only of a progestagen.
[FDA, 1978: 286]
2. U.S. physicians continue to declare that DP is the best contraceptive for certain patients.
- Experience in patients does not support the view that DP is a potentially high risk method and other methods safe. No method is completely safe.
 - Some groups of women needed DP as their contraceptive:
 - Women who found an injection easier than taking a pill daily, using coitus related methods or who have had difficulties with IUDs.
 - Women who have thromboembolic complication.
 - Women who had estrogen-related complications.
 - Retarded young girls.
- In the 12 years old Chiang Mai program (June 1977) 69,316 women had received one or more injections (some up to 48 injections for a total groups experience of 146,508 48 injections, for a total groups experience of 146,508 women years, without a single known death [Cited in Upjohn, 1978: 282].
3. The drug package insert mentions the possibility that irregular bleeding or amenorrhea might occur but does not suggest any means of treatment. On the other hand the package insert does not contra indicate this use of estrogens.
[Upjohn, 1978: 287]
- Not every user needs estrogens. It can be replaced by good counselling.
[Mc Daniel cited by Upjohn, 1978: 287]

4. DP, like other progestogenic and estrogenic hormones, is associated with a risk of congenital malformations in infants exposed to the drug during pregnancy. Because of DP's long acting pharmacological activity, exposure of the embryo, with possibly resultant increased risk, would be greater than with other compounds in the event of pregnancy due to a drug failure. [FDA, 1978: 292]
4. There was no definitive evidence that DP causes birth defects in infants exposed to it during pregnancy, if the drug is given as recommended. [Upjohn, 1978: 292].
- Existing studies so far, do not show any evidence of teratogenic effect. [WHO cited in Maine, 1978: 343]
 - no invasive carcinoma and no other genital malignancy have been seen. [Powell and Seymore, 1971: 39]
 - It is extremely difficult to study because the pregnancy rate is only 0,5 percent. Pregnancies before the first injection were few when the injection was given in the first week in the menstrual cycle [Benagiano and Fraser, 1981: 513; Siriwongse, et al., 1982: 489]. Pregnancies after use rarely occur until hormone levels have dropped very low or are undetectable. [Benagiano and Fraser, 1981: 513]
 - Pregnancy with DP was uncommon, disorders infrequent frequent and any potential teratogenic risk was very small. [WHO, 1982: 205]
5. The practical impossibility for the Upjohn Company to carry out the proposed postmarketing study to determine the risk of breast and cervical carcinoma. [FDA, 1978: 298]
5. The Upjohn company was able and willing to do an adequate postmarketing study. [Upjohn, 1978: 298]
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APPENDIX B

DEBATE ROSE IN 1980.

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- | | |
|---|--|
| <p>1. When the drug is injected, the initial blood levels of DP are high enough to produce a "shock" to the hypothalamus, disrupting the menstrual cycle for three months or longer.
[Minkin, 1980: 50]</p> | <p>1. Evidence available so far demonstrated that DP did not cause any central shock:</p> <ul style="list-style-type: none"> - basal levels of luteinising hormone (LH) and follicle-stimulating hormone (FSH) were not suppressed to as severe a degree by DP as they were by Oral contraceptives - The pituitary response to an injection of Luteinizing Hormone- Releasing Hormone (LH RH) is prompt and indistinguishable from normal control. Several investigators have failed to demonstrate any effect on basal growth hormones released in normal women taking DP as a contraceptive. [Benagiano and Fraser, 1981: 508] |
| <p>2. DP caused liver dysfunction.
[Minkin, 1980: 66-67]</p> | <p>2. A multi-center study carried out under the auspices of WHO did not find any significant change in liver. [Benagiano and Fraser, 1981: 509]</p> |
| <p>3. The drug interferes with carbohydrate metabolism in women.
[Minkin, 1980: 59]</p> | <p>3. DP has an advantage over Oral pills on the basis that there were less alterations in carbohydrate and lipid metabolism. [Diana, et al., 1985: 51-64]</p> |

4. DP inhibits the production and alters the distribution of antibodies.
[Minkin, 1980: 58]
 4. The immuno-electrophoretic pattern in breast milk and serum is not modified by DP.
[Benagiano and Fraser, 1981: 511]
No alteration of the immuno-electrophoretic pattern of maternal milk during DP use was detected.
[Jimenez, et al., 1984: 530]
 5. Some studies indicated that the supply of milk was reduced and could harm infants by interfering with immunoglobins in the breast milk.
[Minkin, 1980: 61-62]
 5. Long term follow up of children breast fed by mothers receiving DP showed no ill effects on their growth and development and health status that can be associated with the use of DP.
[Jimenez, et al., 1984: 523-533]
 6. DP users will suffer uterus atrophies, stop ovulating and become sterile.
[Minkin, 1980: 66]
 6. No correlation between the return to ovarian function and the duration of drug exposure was found.
[Flores, et al., 1985: 361-366]

Return of fertility after discontinuation has indicated that the mean time before conception is 5.5 months. [Pardthaisong, et al., 1984: 23]
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APPENDIX C
EARLY STUDIES OF INJECTABLES AS A CONTRACEPTIVE
IN INDONESIA.

Year	Name	location	No of samples	Type of Drug	Duration	Findings
1967	Sulaiman, Agoestina	Bandung	147	DP	12 months	- no significant side-effect. - DP is a long acting contraceptive.
1968	Agoestina	Bandung	100	DP	36 months	- reversibility 80 % after 1 year.
1970	Sulaiman, Biben, Rusmana.	Bandung	1051	DP and Norigest	87 months	- no method failure for DP - 2.3 method failure for Norigest. - 100 % of DP users get amenorrhea - most of Norigest users get bleeding.
1972	Agoestina	Bandung	100	DP	36 months	- no lactation suppressure - most users tolerated the side-effects.
1973	Barten	Tomohon Minahasa	1285	DP	27 months	- method failure 0.12 per 100 women year. - as popular as IUD - side effect: menstrual disturbances

1973	Sabirin	Surabaya	48	DP	24 months	- 34.2 % users get amenorrhoea. - 19.2 % bleeding - 17 % spotting - effectivity 100%
1974	Pardoko	Surabaya	105	DP	36 months	- no method failure - Continuation rate, 55 % (12mt) 34% (24 mt) - side effects: menstrual disturbances
1974	Noeroel Suherman	Klaten	100	DP	21 months	- no method failure. - most users get amenorrhoea
1974	Syamsuri, E.Djuarsa, Hariadi,a, Sudoko,R, Wayan Giri.	Surabaya	100	Norigest	17 months	- Continuation rate 60 % after 12 mth - no affect on blood pressure - no lactations suppressure. -effective.
1975	Lorens Rumanow, Sutopo	Jakarta	58	Norigest	16 months	- no lactation suppressure. - no method failure. - continuation rate 80 %, 1 year.
1975	Biran Affandi. Harun Harahap.	Jakarta	51 1155	Norigest Pills	12 months	- Continuation rate two time compared to pill - side effects: Pill: bleeding, weight gain Norigest; bleeding, spotting, amenorrhoea.

APPENDIX D

STUDIES OF INJECTABLES AS A CONTRACEPTIVE IN
INDONESIA CONDUCTED AFTER THE INJECTABLES SEMINAR OF 1976.

Year	Name	Location	No of !sampl!	Type of ! drug	Duration!	Findings
1976	Simanjuntak, Sembiring, Hanafiah, Sinnathuray, Sen, D.K Ratnam, S.S	Medan Singapore Kuala- Lumpur	400 200 200	Norigest and DP	24 months	Both of the drugs are safe and effective for contra- ceptive 90.5 % of the users got amenorrhea after 9 months Pregnancy rate, DP, 0.24 NET EN, 0.48 per 100 women Continuation rates, after 24 months: DP 466.2 % NET EN 68.2 %
1977	IPPA	Bengkulu Parepare Manado Banjar- masin Jambi	204 341 1149 500 500	DP	36 months	No method failed well accepted needs more IEC in the society
1978	Barten	Tomohon North Sulawesi	893	DP	18 months	Continuation rates, after 18 months: 69.5 %

1980	Barten	Tomohon North Sulawesi	275	DP	12 months	Return of pregnancy is 8.8 months after last injection.
1982	Hermini, Budianto, Yudo.P, Biran- Affandi.	Bali, East Java, West Java, East Nusa- Tenggara, North Sulawesi, Jakarta	1466	NET EN	18 months	No influence on body weight and blood pressure 33 % of users experienced amenorrhea Failure rate 0.17 per 100 women years.
1984	Agoestina, Bhiwan- diwala, Fieldblum, Mukawi, Setiadi, Ridwan.	Bandung	755	DP	24 months	Had no signi- ficant health impact Low risk of unintended pregnancy no sign of of endometrial cancer no congenital malformation

APPENDIX E

SEMINAR ON DEPO PROVERA

The first seminar was held in Jakarta on July 1976, organized by Bureau of Contraceptive services (NFPCB). This seminar was attended by medical researchers from Research and Medical Development Centers in Java, Bali and North Sulawesi provinces. It was sponsored by Shering and the Upjohn company in Jakarta. This first seminar recommended a pilot project or field trials offering injectables as contraceptives in at least one training hospital for every province in Java and Bali (the seminar asked Dr.J. Barten to continue her North Sulawesi study of Depo Provera in Tomohon).

The second seminar was held in Jakarta on June 1978. The organizer and the participants were the same as for the first seminar, and it was funded jointly by Shering, the Upjohn company and NFPCB. This meeting aimed to evaluate the field trials which were done up to the fourth injection. The main recommendation of this seminar was to continue the field trials up to the eighth injection. It also noted that due to the lack of Norigest, the trials of this drug were postponed until it became available in Indonesia.

The Third seminar, held in Jakarta on November 1979, has organized by Bureau of medical services and fully funded by the NFPCB.

The participants were; all participants who attended the second seminar, the head of medical services section of NFPCB in Java, Bali and ten provinces Outer Islands I, and the implementing unit who served contraceptives to society (such as IPPA, Indonesia Churches Council, Armed Forces, Muhamadiyah).

The important recommendation of this third seminar were:

1. According to the results of clinical and field trials, they agreed to use Depo Provera as a contraceptives in several hospitals with strong controls.

2. Spread the information about DP through the mass media.

3. Further study is still needed, especially several aspects concerning side effects in long run use.

The Fourth seminar, held in Semarang on Mei 1980 was organized and funded by the Indonesian Churches Council (DGI).

The participants were; all participants who attended the third seminar, Edwin Mc Daniel of Mc Cormic Christian Hospital, Chiang Mai, Thailand, and Supporn Koetsawang of Siriraj Hospital Mahidol University, Bangkok, Thailand, and also Felix Rosario, Project Director of Neighbors Family Planning Services Center, Zamboanga city, Philippines.

The suggestions this seminar made to the NFPCB were as follows:

1. Accept Depo Provera for the National Family Planning Program, so that the methods could be enriched.

2. Give good counselling to acceptor candidates and old acceptors especially concerning cycle disturbances.

3. Provide good communication facilities to give guidance for acceptors in order to guarantee regular re-visits and re-examinations.

4. Investigate more carefully the relationship between the use of DP and side effects, especially cancer, in long run use.

5. Make DP available only for the women who already have at least two children [NFPCB, 1980: 6].

APPENDIX F

THE MAIN QUESTIONS USED IN THE INTERVIEW.

No!	VARIABLE	QUESTIONS	!Major Types of Answers !Received.
1.	Duration of use	How long have you used DP?	a.1 - 3 injection b.4 - 8 injection c.9 - 12 injection d.13 and more injection
2.	Source of information	From whom did you first hear about DP?	a.FP Workers b.Health Workers c.Village Head d.Family/relatives e.Others
3.	Reasons for choosing DP	Why did you choose DP?	a.I like it/practical b.I cannot use other methods c.Follow the suggestion of others d.Others
		Why did you change to DP?	a.I failed with IUD b.I failed with pills c.I failed with condoms
4.	Number of other methods used	Did you use another method before using DP?	a.DP was my first method b.DP was my second " c.DP was my third "
		What method did you use the first time?	a.IUDs b.Pills c.Condoms d.Others
		What was the last method you used before using DP?	a.IUDs b.Pills c.Condoms d.Others
5.	Users Opinions about DP	According to your experience, what are your comments about DP?	a.more practical b.free from fear and embarrassment c.free from forgetting d.others

- 6.The Services (first and last service) Where did you obtain DP for the first time?
- a.FP clinic
 - b.Private doctor
 - c. " midwife
 - d.Mobile Med.Team
- Where did you obtain the last/follow up injection?
- a.FP clinic
 - b.Private doctor
 - c. " midwife
 - d.Mobile Med.Team
- 7.The Cost Did you pay?
- a.yes
 - b.no
- If yes, how much?
- a. Rp0.0 - Rp0.0
 - b. Rp0.0 - Rp499
 - c. Rp500 - Rp999
 - d. Rp1000- Rp1999
 - e. Rp2000- Rp4999
 - f. Rp5000 - +
(1 A\$ = Rp860)
- 8.The follow-up injection Were you ever late in taking your follow-up injection?
- a.Never
 - b.Late 1--2 weeks
 - c.Late 3--4 weeks
- If late in taking your follow-up, what did you do?
- a.Use pills instead
 - b.Use condoms instead
 - c.Avoid intercourse
 - d.Nothing
- 9.Nursing mothers Did you nurse your baby?
- a.Yes
 - b.No
- How was your breast milk?
- a.As usual
 - b.Better
 - c.Do not know
- 10.Continuation of use How long will you use DP?
- a.0 --- 6 months
 - b.7 --- 12 months
 - c.13 -- 18 months
 - d.20 -- 24 months
 - e.25 -- and more
- 11.Side effects What side effects did you suffer?
- a.Amenorrhea
 - b.Spotting
 - c.Heavy bleeding
 - d.Irregular bleeding
 - e.Headache
 - f.Increase of weight
 - g.Nervousness
 - h.Others
- 12.The purpose of using What is your objective in using DP?
- a.Stop/prevent pregnancy
 - b.Space children
 - c.Family welfare
 - d.Do not know
-