Contraception as an Important Entry Point in Accessing an Integrated Reproductive Health Care: Evidence From Three Provinces in Indonesia

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Tujuan: Mencari fakta dari studi fisibilitas/studi kelayakan penggunaan kontrasepsi (pelayanan KB) sebagai entri poin aplikasi pelayanan kesehatan reproduksi terpadu di Indonesia.

Bahan dan cara kerja: Data dikumpulkan dari tahun 2001 hingga 2004 di tiga kota dengan tiga propinsi yang berbeda, menggabungkan observasi terhadap peningkatan kemampuan konseling dan pemeriksaan klinis secara keseluruhan dengan menggunakan dokumentasi berbasis komunitas dari kegiatan *outreach* (*outreach education*) terhadap komunitas target. Target komunitas pertama yaitu para pekerja pabrik muda dan tidak menikah di Batam, Provinsi Riau; kedua, perempuan perajin gerabah (pembuat barang-barang tembikar) di Pulau Lombok; dan ketiga ibu rumah tangga yang tinggal di pemukiman kumuh di antara dua wilayah pelacuran di Surabaya, Provinsi Jawa Timur. Di setiap tempat, studi dilakukan bersama organisasi mitra yang berbeda, seperti: Yayasan Mitra Kesehatan dan Kemanusiaan (Batam), Pusat Informasi Kesehatan dan Perlindungan Keluarga (Lombok) dan Yayasan Hotline Surabaya.

Hasil: Di Batam, *outreach* mencakup 3.740 orang dalam 237 kunjungan klinis. Di Lombok menjangkau 1.502 perempuan dalam 183 pelayanan klinis. Surabaya, Jawa Timur, jumlah perempuan yang terjangkau sebanyak 1.313 orang dalam 869 pemeriksaan kesehatan reproduksi.

Kesimpulan: Kontrasepsi sangat efektif sebagai entri poin sebelum menyentuh isu sensitif seperti tentang Infeksi Saluran Reproduksi/Infeksi Menular Seksual (ISR/IMS), masalah psikologi remaja (pacaran, perilaku berisiko, dan kehamilan yang tidak direncanakan). Hasil studi memperlihatkan bahwa faktor eksternal berpengaruh pada fisibilitas/kelayakan *pilot project* di masa mendatang. Penjelasan tentang faktor-faktor eksternal tersebut akan dijelaskan pada *paper* lengkap.

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Kata kunci: kontrasepsi, kesehatan reproduksi

Objectives: *To seek evidence from a feasibility study of using contraception (family planning services) as an entry point for implying an integrated reproductive health services in Indonesia.*

Material and methods: *Data were collected from 2001 till 2004 in three urban sites of three different provinces, combining observation of skills improvement in counseling and overall clinical examination with community-based documentation of outreach education to targeted communities. The first target community was young adults in Batam Island, Riau province; the second target community was women pottery makers in Lombok Island; and third target community was housewives living in a slum area next to a brothel in Surabaya, the capital of East Java province. In each site, the study appointed different partner organizations, consecutively they were: Yayasan Mitra Kesehatan dan Kemanusiaan (Partnership in Health and Humanity Foundation), Pusat Informasi Kesehatan dan Perlindungan Keluarga (Center for Information on Health and Family Protection), and Hotline Surabaya Foundation.*

Result: *In Batam Island, the outreach education activity covered 3,740 people resulting in 237 clinical visits. In Lombok Island, a total of 1,502 women had been outreached and 183 utilize clinical services. In Surabaya, East Java, a total of 1,313 women had been outreached, resulting in 869 clinical reproductive health examinations.*

Conclusions: *Contraception is a very effective entry point before touching sensitive issues such as RTIs/STIs, adolescents' psychological problem such as dating problems and risky sexual behavior, and unplanned pregnancies. In addition, findings show that influential external factors that affected the level of feasibility to upscale these pilot projects in the future. The full paper will present these external factors.*

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Keywords: *contraception, reproductive health*

BACKGROUND

Support for integrated reproductive health (RH) care packages has not grown to the fullest since the concept was endorsed at the 1994 International Conference on Population and Development (ICPD) in Cairo. Although over 180 countries, including Indonesia, signed their promises to strengthen programs to better meet women's needs and to put human rights, human development and individual well-being, rather than program-targets, as the center of policies' attention. Moreover, a greater responsibility on the part of men was also called for in the 1994 ICPD.

In reflection, the promise to deliver a comprehensive or integrated RH service to all especially poor women is far from fulfilled. In Indonesia, two years after attending the Cairo conference, the Ministry of Health held a national workshop in May 1996 to adopt four components in the formulation of an integrated essential reproductive health care package. These essential components are: (1) family planning (FP), (2) maternal and child health (MCH), (3) adolescent reproductive health (ARH) and (4) Sexually Transmitted Infections (STIs) prevention and treatment. However, another two years were needed to accept an offer from a team of experts to develop a manual that contains practical

steps to implement this Essential Reproductive Health Care Package at community health center level. The manual, *Practical Steps to Implement Essential Reproductive Health Care Package* was jointly funded by the United Nations Population Fund (UNFPA) and the Ministry of Health in 1998 and was formally released by the Ministry of Health in 1999.[1]

During the same year (1999), the World Health Organization (WHO) announced that STIs are a serious global treat to the health of people in developing countries, not only because Human Immunodeficiency Virus (HIV) infections has emerged as a global pandemic, but also because there are million of new cases of curable STIs occur each year. And the transmission and acquisition of HIV are facilitated by the presence of these other STIs. According to WHO, there were 170 million new cases of Trichomoniasis, 89 million new cases of Chlamydia, 62 million new cases of gonorrhea and 12 million new cases of syphilis were reported in 1995. Over 90% of these cases occur in developing countries, and certainly, including Indonesia.[2]

In women of reproductive age (15 to 44 years), untreated STIs are the leading cause of pregnancy-related complications, as well as congenital infections. Failure to treat an STD has very bad consequences, for instance, Pelvic Inflammatory Disease (PID) that can cause infertility, ectopic pregnancy, and chronic pain. In a paternalistic Moslem society like Indonesia, infertility brings a devastating emotional pain because motherhood defines a woman's status in the family. The impact of STIs on pregnancy outcomes and neonate's health is equally severe. Untreated STIs can result in fetal loss, prematurity and low birth weight. We know that 40 percent of pregnancies in mothers infected with syphilis will end in spontaneous abortion, stillbirth or perinatal death. STI infections can also be passed on to unborn children, causing congenital syphilis, Ophthalmic Neonatorum (eye infections that can lead to blindness without treatment) and Chlamydia pneumonia in newborns.[3]

Indonesian's maternal mortality ratios (MMR) according to the 1994 Indonesia Demographic and Health Survey (IDHS) stayed high at 390 per 100,000 live births and has not declined since then because the 2002/03 IDHS presented 307 per 100,000 live births but without including high maternal deaths data from the conflict area of Aceh and the three worst provinces in the Eastern part of Indonesia (Maluku, North Maluku, and Papua).[4] This is an irony because the government is proud to present the family planning data of fertility decline from 5.6 per woman in 1967/1970 to 2.8 in 1995/1997. Contraceptive prevalence rates steadily increased from 52% in 1994 to 54.7% in 1997. Although male contraception did not show anywhere more than 2% over the decade.[5-7] The number of unmarried but sexually active young adults shows an increasing trend over the years, 22.3% males and 3.2% females (among factory workers in Surabaya); and, 20.3% males and 6.0% females (among high school students).[8] In early 1990s, a study in Malang, Manado and Bali presented 26% and 29% young people aged 20-24 years admitted being sexually active.[9,10] According to a study in North Jakarta, 39% of housewives have once experienced any type of STIs and 14% more than one type of STIs - with the most prevalent was Chlamydia (9.3%). Among women sex workers, Chlamydia reached over 25% in Jakarta, 30% in Manado, and over 45% in Surabaya; while syphilis reached 10% in Jakarta, 30% in Surabaya; and gonorrhea reached 20% in Jakarta, 23% in Manado and over 40% in Surabaya. Overall, STI prevalence rates of Candidiasis were 13.5%; Bacterial Vaginosis 18.3%; Chlamydia 6.7%, and Trichomoniasis 2.9%.[11,12]

Half of women with STIs do not even know that they have STIs because of incapability to recognize the symptoms. Women are more affected by STIs than men are more often asymptomatic and more difficult to diagnose.[13] Thus, most STIs in Indonesian women go untreated. Even when they do experience symptoms, many do not want to seek treatment because they fear the stigma of attending an STI clinic. Most STIs go undiagnosed in Indonesia, despite the fact that women actually have frequent interactions with community health care providers as they frequently visit family planning or immunization services. This high level of missed-opportunity led to the fact that women who contracted STIs received no treatments, no information and no counseling on how to further prevent STIs transmission to their newborns.

Integrating the four essential components under one community health center (*puskesmas*) in an integrated manner, be that through a general practitioner or a midwife, is an ideal strategy to reduce missed opportunity to detect STIs at early stages. However, family planning and maternal and child health have been managed separately for over thirty years in Indonesia. Therefore, bureaucratic resistance has been seen higher at the central level. More progress in integration at the community health centers has been observed. However, the lack of practical guideline to integrate STIs (including HIV/AIDS prevention, screening and treatment)

into the other components (FP or MCH obstetric services) hold it back. The hypothesis is "*if a simple practical step-by-step guideline to guard the safety of the integration procedures is available, then the four components of essential RH care package can be delivered at the community health center by the same health care personnel and on the same day.*"

In this context, the technical guidelines/manual, *Practical Steps to Implement Essential Reproductive Health Care Package* was seen as the remedy to tackle the obstacle of making integrated RH services available at community level. In the long run, the expected outcomes to be achieved are: (a) minimum missed opportunities to detect STIs among women; and (b) improved providers' skills that lead to a better quality of RH care delivery. Between the year 2000 and 2005, a series of observational studies have been implemented in three different areas of Indonesia to pre-test this *Practical Steps* manual (1999). This working paper uses a comparative approach to analyze the process of pre-testing this technical steps/guidelines to answer the following questions about (a) what are the standard personnel qualifications to be fulfilled to be able to implement integrated RH care package; (b) what are the extent of STIs able to be tested and detected among FP and MCH clients; and (c) is it effective to use FP or MCH services as an entry point to make integrated RH services available at community level?

OBJECTIVES

To seek evidence from an operations research conducted in three study sites at three province-capitals of Riau Islands, East Java and West Nusa Tenggara to evaluate the feasibility of using the *Practical Steps Guideline to deliver an integrated RH care package* at community level. Family Planning service was chosen as an entry point since FP has shown stable high acceptance in Indonesia over the last decade. The ultimate goal of integrating these previously fragmented services is to obtain improvement of women's reproductive health by creating greater access to a more comprehensive reproductive health services for all, especially poor and marginalized women.

METHODOLOGY AND LOCAL PARTNER INSTITUTIONS

The operations research was carried out in two stages at each of the three study sites. In the first stage, the local non-governmental organizations (NGOs) as our partner institutions conducted an outreach activities in the targeted community to be studied. In Batam, this was conducted by *Yayasan Mitra Kesehatan dan Kemanusiaan* (Partnership in Health and Humanity Foundation) in April 2000 - November 2000. In Surabaya, the capital East Java province, this was conducted by *Hotline Surabaya Foundation* from January 2002 until June 2004. In Lombok, NTB province, this was conducted by *Pusat Informasi Kesehatan dan Perlindungan Keluarga* (Center for Information on Health and Family Protection) in July - November 2002.

For the second stage, a one- to two-year observation of the number of clinical visits made by those that have been approached during the outreach activity by the local NGO (partner institution) in the three study sites were recorded in each study site. In order to be as representative as possible, we chose finite subpopulations as the targeted groups that would serve as denominators for the estimated STIs prevalence rates. In Batam, this was conducted amongst young and unmarried migrant factory workers who live without parental patronage in a closed industrial dormitory compound. In Surabaya, the capital of East Java province, the selected sample population lives as housewives in a slum area between two large brothels. In Lombok, West Nusa Tenggara province, this observation was conducted amongst women pottery makers. In all three study sites, all respondents were women of reproductive age 15-49 years.

Overall, data were collected from 2000 till 2004 in these three urban study sites to pre-test the feasibility of applying this *1999 Practical Steps Guideline to deliver an integrated RH care package* at community level. A research design that combined qualitative and quantitative methods was employed to measure results of outreach activities in the form of actual visits made to the clinic for counseling or diagnostic and treatment services. The research hypothesis was "*if a simple practical step-by-step guideline to guard the safety of the integration procedures is available, then the four components of essential RH care package can be delivered at the community health center by the existing health care personnel under the same roof.*"

Table 1. Study sites and total population

	Batam (Riau islands)	Surabaya (East Java)	Lombok (West Nusa Tenggara)
Study Sites	Batamindo Industrial Park compound	Krembangan subdistrict	Banyumulek village
Total population	85,500 people	114,506 people	13,247 people

Study site 1. Batam island, Riau province

Target community was unmarried factory workers living inside the Batamindo industrial dormitories compound. The local NGO successfully conducted an outreach educational activity that covered a purposive sample of 3,740 female workers living in selected dormitories out of the total 85,500 workers living in that compound. The outcome of this outreach activity was measured through the total number of 287 clinical visits made by 237 female workers who gave their consent to be part of this study, from April 2000 till August 2002.

Study site 2. Surabaya, East Java province

Target community was low income women in Krembangan sub-district (*kecamatan*) with a total population of 114,506 people. This study site is located between two large brothel areas of Bangun Sari and Tambak Sari which are occupied by 1,800 women sex workers (Police Data, Polsek Data Screening 2002). The local NGO successfully conducted an outreach educational activity that covered the poorest but densely populated five villages (*kelurahans*) of Moro Krembangan, Dupak, Krembangan Selatan, Kemayoran and Perak Barat, totaling of 7,794 households (HH). The outcome of this outreach activity was measured through the total number of 1,313 clinical visits made by 869 women who gave their consent to be part of this study, May 2002 until end of March 2004.

Study site 3. Lombok, West Nusa Tenggara province

Target community was women earthenware (clay) pottery makers in Banyumulek villages at the outskirt of Mataram, the capital of West Nusa Tenggara province. Out of the total population of 13,247 people, 35.7% (4,730 people) earn their income from making clay-potteries. The outreach activity of this study covered 1,502 (31.75%) of female pottery makers. They prepared the clay mixture, hand-molding the mud clay, decorating and glazing, and firing (baking) the potteries without masks everyday without interval. Earthenware is a pottery clay mixture that is fired at a lower temperature. The outcome of this outreach activity was measured through the total 1,292 clinical visits made by 813 women pottery makers (54.2% of total target of 1,500 women) who gave consent to be part of this study, between January 2002 and June 2004.

EXPECTED OUTPUTS/OUTCOMES

The results showed that the *1999 Practical Steps Guideline to deliver an integrated RH care package* was effective in guiding community-based health care personnel to implement the integration of STIs into family planning (FP) program. Three type of outcomes observed are: (A) outcomes depend on the type of health care personnel available; (B) type of STIs able to be tested and detected can unravel the STIs situation in a particular sub-community which lead to the knowledge of necessary preventive information and counseling to be given; and (C) the FP program is a more effective entry point to create women clients' awareness of STIs and later on for demanding access to community-based RH care package services.

RESULTS

(A) Outcomes depend on the type of implementers

Obviously, the capability to conduct successful outreach, good counseling and quality clinical services determined the outcomes, indicated in this operations research by the number of visits to the clinic. In all three study sites, the first stage of the study yielded high outreach results.

In Batam, the local NGOs as our partner institution were *Yayasan Mitra Kesehatan dan Kemanusiaan* (YMKK or Partnership in Health and Humanity Foundation). This women's NGO has 14 outreach staff but only 2 staff have clinical health knowledge at the level of paramedics. They were able to approach 3,740 unmarried female factory workers. However, only 6.3% was convinced and visited the clinic for further counseling and diagnostic services. The staff had difficulties in mastering STIs symptoms, the basis information for promoting counseling and early detection of STIs. Because they failed to provide quality information and counseling, the number of visits was very low (less than 10%).

In Surabaya, the local NGO that implemented the project was *Hotline Surabaya Foundation*. This NGO is also a women's NGO with originally 12 staff, but in addition to the existing staff, they hired a full time medical doctor and a midwife to help in translating the STIs related information into common language communication materials. The medical doctor and midwife provided counseling and on-site clinical services during and after data collection had been completed. Very good in networking, this NGO was able to get local university people and local government's commitment to help. Consequently, they received good back-up laboratory and Ob-gyn specialist referral facility. This NGO was successful in recording 1,307 visits or 99.5% of the total 1,313 housewives approached in the outreach activity stage.

In Lombok, NTB province, the project was implemented by *Pusat Informasi Kesehatan dan Perlindungan Keluarga* (Center for Information on Health and Family Protection) which is headed by a woman medical doctor. This NGO has two doctors, one midwife, one paramedic, and one public health educator who successfully trained 30 community members as its cadres. The head of the Center was able to build close professional relationship with the local Ob-Gyn Department of the local District Hospital and its Ob-Gyn specialist as its back-up referral facility. This NGO was successful in providing services to 1,292 visitors or 86% of the 1,502 outreached female pottery makers in the study site.

Table 2. Level of Personnel Capability and Total Clinical Visits Achieved, 2000-2004

	Batam (Riau Island)	Surabaya (East Java)	Lombok (West Nusa Tenggara)
Staff has adequate health background	No	Yes	Yes
MD and midwife fully available to help in STIs diagnostic	No	Full-time hired (one MD and one midwife)	Headed by a MD (one midwife, one paramedic and 30 community cadres)
ObGyn referral back up	No	Yes	Yes
Total outreach coverage	3,740 unmarried female factory workers	1,313 housewives	1,502 female pottery makers
Total visits to clinic	6.3% (237)	99.5% (1,307)	86.0% (1,292)

(B) Type of infections detected

Below are the results of observation among different RH care package implementers, which certainly were determined by the skills and knowledge of the health care providers, a medical doctor or a midwife. In Surabaya and Lombok, observation showed that the health care providers were good in interacting with their clients. They explained the procedures before conducting physical examination and laboratory tests.

Results are divided into two categories; Table 3 presents prevalence data on Reproductive Tract Infections that are considered non-STDs while Table 4 presents prevalence data on Sexually Transmitted Infections that are also considered as Sexually Transmitted Diseases (STDs). The magnitude of these prevalences directly unravels the STIs situation in a particular sub-community. And, this leads to a more informed situation of what preventive information and counseling are necessary to be given.

Table 3. Reproductive Tract Infections (non-STD) by Study Sites

Variables	Batam (Riau Island)	Surabaya (East Java)	Lombok (West Nusa Tenggara)
Total client	132	869	813
Bacterial vaginosis[1]	26.0% (100)	24.8% (690)	87.6% (267)
Candidiasis[1]	9.0% (100)	8.6% (690)	15.4% (267)
Any RTI	26.5%	38.9%	3.4%

[1]*On-site Gram Stain*

Bacterial vaginosis was the most prevalent reproductive tract infection (87.6%) in Lombok, and was also the most prevalent in Batam (26.0%) and in Surabaya (24.8%).

Table 4. Sexually Transmitted Diseases (STDs) by Study Sites

STDs Identified	Batam (Riau Island)	Surabaya (East Java)	Lombok (West Nusa Tenggara)
Total Lab-tests	132	869	813
Trichomoniasis[2]	8.2% (85)	23.6% (687)	2.0% (1075)
Syphilis[3]	9.3% (43)	9.0% (301)	3.4% (147)
Chlamydia[4]	–	22.1% (271)	2.2% (90)
Gonorrhea[5]	0% (55)	26.9% (271)	6.0% (67)
Genital warts (HPV)[6]	3.9% (132)	4.4% (869)	0.6% (813)
Chancroid[6]	–	1.5% (869)	–
Genital herpes (HSV 2)[6]	–	2.5% (869)	–
Any STI	9.9%	26.7%	0.5%

[2]*On-site Saline Wet Mount* [3]*VDRL/TPHA* [4]*Gen Probe*
[5]*Cervical culture (Batam & Mataram), Gen Probe (Surabaya)*
[6]*Clinical diagnoses*

In Batam, the most prevalent STD was Syphilis (9.3%), followed by Trichomoniasis (8.2%) and Genital warts (3.9%). Gonorrhea was not found. Specific laboratory test (Gen probe) for Chlamydia was not performed. Physical examination to diagnose Chancroid and genital herpes were also not conducted. In Surabaya, laboratory-tests results indicated high prevalence of Gonorrhea (26.9%), followed by Trichomoniasis (23.6%) and Chlamydia (22.1%). From a total of 869 clients who visited the clinic, 38.9% of them experienced one or more non-STD RTIs and 26.7% have contracted one or more STDs. In Lombok, the most prevalent STDs was Gonorrhea (6.0%) followed by Syphilis (3.4%), Chlamydia (2.2%), Trichomoniasis (2.0%) and Genital warts (0.6%). Physical examination for Chancroids and Genital herpes were not done.

(C) Is FP program an effective entry point for introducing a comprehensive RH services?

The answer is YES, since observation from the three study sites conclude that:

1) Integration of RH services into minimum essential package is feasible to be implemented by private (NGO) arrangement but must be back up by a public referral institution such as a district hospital.
2) An integrated RH service contradicts existing compartmentalized services. Clearly there are differences in clients who visited FP and STD services. Unlike STD clinic clientele, FP clients are typically women seeking contraceptive services who are generally unaware of STDs. However, study results indicate a reasonably high prevalence of STIs.
3) While most of community health centers (*puskesmas*) and district hospital have medical doctors and midwives, there are very few records of STDs diagnosed among women as housewives, or among FP clients. But the results from these three studies presented evidence that those public health records do not reflect the real reproductive health situation.
4) While health care providers at public institutions in general prefer to avoid confronting the reality of STDs and the need for partner notification and treatment in their efforts to help clients "save face", NGOs staff that have medical background are able to provide counseling and treatment to a FP client with STIs. This opens an opportunity to treat her infected partner too and protect the woman because it does prevent reinfection. Through a FP service, promotion of partner referral and treatment has a higher opportunity.
5) Women seeking care at a community health center (*puskesmas*) are often of lower socio-economic status, and are usually not asked or informed about STD/RTI risks when they present for FP services, even if presenting with potential RTI symptoms. A guideline used by a well-trained FP provider will be able to reduce this missed opportunity to treat STIs among women.
6) A simple but complete RH care medical record for use with all FP clients can assess STD risk issues for little additional cost, thus opening the door for discussion of prevention and counseling. Even just a simple advice from the FP provider on condom and spermicide use can provide protection against STDs, and is a step up from current FP and/or MCH services available in many community health centers in Indonesia.

CONCLUSION

The technical guidelines/manual, *Practical Steps to Implement Essential Reproductive Health Care Package* has the potential to tackle the obstacle of making integrated RH services available at community level. The three study findings in three different localities with different target population between year 2000 and 2005 present evidence that: (a) missed opportunities to detect STIs among women can be reduced; (b) more impressive skills improvement to implement integrated RH care package were found in clinics where the NGO staff have medical background (a doctor and/or a midwife), because they can refresh their memories on standard procedures to test and detect STIs among FP and MCH clients; and (c) a FP services is an effective entry point to make integrated RH services available at community level.

In Batam, where the NGO has no staff with medical background (doctor or midwife), although they failed to deliver a comprehensive RH care package, they are able to deliver a more comprehensive FP services by adding information about Emergency Contraception, using the Practical Steps guideline. We believe that contraception is also a very effective entry point to touch further sensitive issues such as sexual violence and unplanned pregnancies. In closing, the only external factor that holds back the feasibility to upscale examples from these pilot projects is the government's low commitment to change and contradict the existing compartmentalized services that keeps FP separate from MCH and far from STDs, a condition that has been around for over thirty years.

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