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Service factors affecting access and choice of contraceptive services in Myanmar

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SERVICE FACTORS AFFECTING ACCESS AND CHOICE OF CONTRACEPTIVE SERVICES IN MYANMAR

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1. Background

To date, very little data has been available from Myanmar on issues related to the access and quality of reproductive health services. Over the past five years, the Department of Health has been engaged in an interventions research project in two townships of the country to document constraints to the provision of reproductive health services, primarily related to birth spacing, and identify and implement township level interventions to address some of these issues. The research conducted as part of this project has involved a range of methodologies that provide an insight into some of the issues related to quality and access to birth spacing services.

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1.1. The project

At the request of the Ministry of Health in Yangon, and with assistance from Population Council and International Council on Management of Population Programmes (ICOMP), WHO conducted a contraceptive method mix assessment in 1996 (WHO, 1997). This assessment was the first stage of a three-stage strategy for contraceptive introduction (Spicehandler and Simmons, 1994), promoted by WHO/HRP's[3] Strategic Programme Component on the Introduction and Transfer of Technologies for Fertility Regulation. The assessment looked at both users' needs and service delivery capacities to propose ways to respond to unmet need for contraception and to improve reproductive health status. Two key recommendations arose from the assessment and formed the basis of the second phase, or Stage II. These were, firstly, the urgent need to improve the quality of contraceptive services, and secondly, the need for a more comprehensive approach to reproductive health service delivery, with particular focus on treatment and prevention of sexually transmitted infections (STIs) and reproductive tract infections (RTIs).

The project *"A Township Model for Improving Quality of Care in Reproductive Health Services in Myanmar"* was developed with the specific objectives to: (1) improve quality of care in relation to hormonal methods; (2) strengthen private sector service provision; enhance community capability for birth spacing; and (3) broaden the scope of reproductive health services to include the management of RTIs and STIs. Two townships were selected for this project, Pyay township in Bago division, and Kalaw township in the Shan State. Stage II has an important research component. In 1997 a stand-alone qualitative study of reproductive morbidities was undertaken. This was followed by baseline data collection activities in late 1998 and early 1999, including qualitative in-depth interviews in the form of a rapid assessment, an adapted situation analysis, and a quantitative survey of women of reproductive age. Following the baseline data collection, a series of interventions were undertaken to address the specific objectives of the project. This included the development of new information materials and refinement of existing ones, an updating of the training curriculum, training of

3. HRP: Special Programme of Research, Development and Research Training in Human Reproduction.

basic health staff and private sector providers, and the provision of supplies to strengthen the diagnosis and treatment of RTIs. In late 2001 a further round of data collection was undertaken, with a focus on the service delivery setting, using a modified situation analysis approach. Table 1 shows the different data collection techniques that have been used during the course of the project.

Table 1
Number of participants in the various data collection activities, by township

	Pyay	Kalaw
Reproductive morbidities study (1997)[a]		
Free-listing	12 (32)	8 (26)
Focus group discussions	10 (81)	11 (80)
In-depth interviews	51	57
Pile-sorting	25	28
Semi-structured interviews (1998-1999)[b]		
Contraceptive users	17	17
Non-users of contraception	12	13
Men	11	12
Community leaders	6	6
Service providers	27	27
Situation analysis (1998-1999)[b]		
Inventory	11	9
Observations	16	16
Exit interviews	18	16
Survey (1999)[c]		
Women of reproductive age	795	353
Situation analysis (2001)[d]		
Inventories	31	32
Provider interviews	50	47
Provider-client interactions	26	44
Exit interviews	42	49
Mystery client visits to drug shops	35	35

Figures in parentheses indicate the total number of participants involved in the group free-listings and FGDs.
Sources: *a*. Population Council and Department of Health (2001);
b. Department of Health and Population Council (2000*a*);
c. Department of Health and Population Council (2000*b*);
d. Department of Health and Population Council (2002).

1.2. Reproductive health service delivery

In Myanmar, public sector health services are provided through a network of clinics in both urban and rural areas, organized at the township level. There are 324 townships in Myanmar, with an average population of 150,000. In larger urban areas, maternal and child health (MCH) clinics provide reproductive health services, and in rural areas the services are provided through station hospitals, rural health centers (RHCs) and sub rural health centers (SRHCs). In most townships there are one or two station hospitals and four or five RHCs. The rural health centers are generally staffed by a health assistant, a lady health visitor (LHV) and five midwives. Within the jurisdiction of each of the RHCs, there are about four SRHCs at with a midwife is stationed to provide services to between five and ten villages. Supplementing these clinic-based services, the midwives and LHVs often provide services at their own home and at the home of clients. These outreach services are not formally organized or regulated, but are an important source of services for many women. There are also voluntary community based workers in a number of villages that do not have a RHC or SRHC. Auxiliary midwives (AMWs) are trained to basic maternal health services and to provide health education. Male community health workers (CHWs) are primarily a source of health information to the community.

In addition to public sector services, there is a large private sector. In urban areas there tend to be numerous private general practitioners (GPs) and drug shops where women can receive contraceptive services and supplies. In rural areas these tend to be absent, although condoms, oral contraceptive pills and injectable contraceptives are sometimes sold at village shops. Public sector service providers also often provide some private services. As mentioned above, public sector provides often services out of the formal clinic setting, and these often bear a closer resemblance to private than public services.

1.3. Birth spacing in Myanmar

Contraceptive services have long been provided in the private sector in Myanmar, although provision in the public sector is relatively new and still has limited geographic coverage. Beginning in 1991, public sector birth spacing services are now provided in approximately one third of Myanmar's 324 townships. Data from a national Fertility and

Reproductive Health Survey (FRHS) conduced in 1997 found that 32.7% of currently married women currently used contraception, the majority of which were hormonal methods (injectables and oral contraceptives), followed by female sterilization (Table 2).

Table 2
Current contraceptive use data, by township and method, 1999 (%)

	Pyay[a]	Kalaw[a]	FRHS 1997[b]
Any method	51.7	33.1	32.7
3 month injection	20.2 (39.0)	13.3 (40.2)	11.7 (35.8)
Daily oral contraceptive	11.8 (23.0)	6.5 (19.6)	7.4 (22.6)
Condom	0.5 (0.9)	0.3 (1.0)	0.1 (0.3)
Intrauterine device	4.4 (8.5)	1.7 (5.2)	1.3 (4.0)
Female sterilisation	3.8 (7.3)	5.1 (15.5)	5.6 (17.1)
Male sterilisation	2.7 (5.1)	0.7 (2.1)	2.3 (7.0)
Safe Period	1.6 (3.0)	2.7 (8.2)	2.4 (7.3)
Withdrawal	0.0 (0.0)	0.3 (1.0)	0.8 (2.4)
Monthly injection	5.3 (10.3)	1.4 (4.1)	- *
Monthly oral contraceptive	1.4 (2.7)	0.7 (2.1)	- *
Other	0.2 (0.3)	0.3 (1.0)	1.1 (3.4)
N	638	293	15,588

Figures in parentheses show the proportion of current users using a specific method of contraception.
* The FRHS didn't differentiate between the monthly methods and other injectables and oral contraceptives.
N = currently married women.
Sources: *a*. Department of Health and Population Council (2000*b*);
b. Ministry of Immigration and Population and UNFPA (1999).

1.4. Project townships

The project townships in which project activities have been undertaken were selected to represent a variety of programme and socio-economic and geographic situations. At the start of the project both Pyay and Kalaw were new birth spacing programme townships. Pyay township receives support from UNFPA, whereas birth spacing services in Kalaw township have been supported through UNDP's primary health care project. Pyay township includes a moderate sized

urban centre in a rice growing area on the floodplain of the Ayeyarwaddy River. In comparison, Kalaw is more rural. It is a mountainous township, with considerable ethnic diversity, in the southern Shan State. Some areas of Kalaw are heavily forested, while others are under cultivation with potatoes, other vegetables, and terraced rice production. The two townships also differ in regard to STI treatment services. Pyay is the headquarters of one of the government's 36 STI teams, whereas Kalaw lacks the presence of this vertical programme structure. Data from the Ministry of Health indicates that Kalaw has a population of approximately 130,000, compared with 250,000 in Pyay.

Table 3
Background data of women of reproductive age, by township (%), 1999

	Pyay	Kalaw
Residence		
Urban	51.4	37.7
Rural	48.6	62.3
Religion		
Buddhist	97.9	93.8
Muslim	2.0	4.5
Christian	0.1	1.4
Other	0.0	0.3
Education		
No formal schooling	5.2	34.0
<5 yrs, or monastic	58.6	38.5
6-10 yrs	29.2	20.7
11+ yrs	1.8	1.7
University/college	5.3	5.1
Employment		
Agricultural/forestry	32.5	61.2
Professional/financial	3.0	1.4
Manufacturing/construction/service/transport	18.9	9.6
Social/community work	4.5	4.0
Not working	41.1	23.8
N	795	353

Source: Department of Health and Population Council (2000*b*).

The baseline survey provides some quantitative data on women of reproductive age in the two townships (Table 3). Over 60% of women of reproductive age live in rural areas in Kalaw, compared with just under 50% in Pyay. This is also reflected in figures for women's employment, where over 60% of women in Kalaw are engaged in agriculture or forestry, compared with 33% in Pyay. Education levels are generally higher in Pyay, with just 5% of women receiving no education, compared with 34% in Kalaw.

The survey also gives an insight into the contraceptive practices of women in the two townships (Table 2). In both townships, reported current use of contraception was restricted to currently married women. Just over half (51.7%) of these women in Pyay were using contraception, compared with one third (33.1%) in Kalaw. The more urban nature of Pyay township, plus the better transportation and more affluent population are likely to be factors influencing this higher contraceptive use compared with Kalaw. The Kalaw figure is similar to the national figure of 32.7% from the FRHS (Ministry of Immigration and Population and UNFPA, 1999). The pattern of contraceptive use in Kalaw is also similar to the national pattern.

2. Findings

This paper presents selected findings from the data collected as part of the project *"A Township Model for Improving Quality of Care in Reproductive Health Services in Myanmar"* to look at issues of access and quality of care in birth spacing services in Myanmar. The paper draws from findings presented in a number of project reports (Population Council and Department of Health, 2001; Department of Health and Population Council, 2000*a,b*; Department of Health and Population Council, 2002). To structure the paper we have decided to use the framework outlined in a paper by Bertrand *et al.* (1995), which highlights the importance of issues of access, quality of care and medical barriers in the uptake and continuation of contraceptive use. They argue that access impacts whether or not the individual has contact with the service provider, quality of care affects decisions to start and continue contraceptives, and medical barriers may prevent clients from receiving a specific method. Recognising that we are working in an environment where very limited data is available, at this stage we do not attempt to quantify

or qualify the links between these, or to directly link these to contraceptive use or continuation in Myanmar, but to describe the situation with regard to these points, and highlight areas where data is not available. Where pertinent, data from other available sources is used to supplement that collected within the scope of the project.

2.1. Access

2.1.1. Geographic or physical accessibility

The first issue raised under access is the most traditional of the access concepts, that of geographic or physical accessibility. Bertrand *et al.* (1995) describe this as "the extent to which family planning service delivery and supply points are located so that a large proportion of the target population can reach them with an acceptable level of effort".

As described above, reproductive health services, including contraceptive services, are provided through a network of public and private service providers in both urban and rural areas. However, actual physical access to these services differs considerably throughout the country.

Of our two project townships, Pyay is relatively urban with a good system of roads. The population is generally more mobile, meaning that contraceptive services can be reached more easily within a woman's daily activities. Kalaw on the other hand is a geographically large township with a low population density, and a poorer and less mobile population. While the location of health centers has been well chosen to provide as wide access as possible, many villages are still located at a considerable distance from the nearest facility, with little transportation and difficult terrain.

Private facilities, drug shops and private general practitioners are generally open both mornings and afternoons for seven days per week, with some also providing services in the early evening. Public facilities are officially open for considerably less time. Rural health centers tend to be open three mornings per week, and sub rural health centres for one to three mornings per week. During the hours that the public facilities are officially closed, the health staff conduct home visits for a range of reproductive health services. Since health staff are often also resident at the public health facilities, clients visiting out of official clinic hours will also be provided with services.

Quantitative data is not available on the reasons for women not going to a particular service delivery point, although survey data in Pyay and Kalaw indicate that 30.6% (n = 422) of current contraceptive users chose their service provider primarily because they were close to home. Qualitative interviews in Pyay found little evidence that geographic access was constraining the use of contraception, which was in contrast to the interviews in Kalaw, where geography was identified as a major barrier to access and health care provision. With the considerable distances in many of the rural areas and the difficulty of transportation, many potential clients do not have regular access to trained providers. The difficult terrain impacts not only on women's ability to reach the services, but also for providers to reach potential clients through outreach services. In Kalaw, only 13% of providers (n = 46) report providing most of their contraceptive services at the home of the client, compared to 46% (n = 46) in Pyay. In fact, in Kalaw, at least two midwives interviewed expressed concern that they were not able to visit the villages under their jurisdiction as often as was necessary.

One response to issues of physical access is the example of Nan Taing RHC in Kalaw. There is a five-day touring market in the Southern Shan State, to which many men and women travel to sell and buy agricultural produce. One of the sites of this touring market is close to Nan Taing RHC, and the clinic varies the opening days and hours to provide an opportunity for those visiting the market to seek health services. In the qualitative interviews many women and men reported that they would use the opportunity of visiting the local touring market to visit a service provider.

These issues will not be easy to address, without considerable investment in infrastructure and staffing. Putting more resources into providing outreach services for birth spacing may be one solution, but the cost of such an intervention is likely to be high, so some assessment of the cost and impact of such a change in means of service delivery would be warranted.

2.1.2. Economic accessibility

Economic accessibility refers to "the extent to which the costs of reaching service delivery or supply points and obtaining contraceptive services and supplies are within the economic means of a large majority of the target population" (Bertrand *et al.*, 1995). Assessments in Myan-

mar have suggested that cost is a considerable barrier for many women to access and continue use of contraceptives (WHO, 1997; Ministry of Health and UNFPA, 1999). However, in the baseline quantitative survey in Pyay and Kalaw, only 4% of current users reported this as the main reason they chose their specific service provider. In data from the two townships combined, 21.8% of the 427 current users of contraception thought that their method had been either a little or a lot too expensive. However, only 4.0% had chosen their provider because of the cost, and just 3.4% of the 233 past users of contraceptives reported discontinuing because of the cost.

Service providers were asked how much they charge for specific contraceptive services. The average cost of three-month injectables was just over 300 kyats,[4] with oral contraceptives costing around 100 kyats, an IUD insertion approximately 540 kyats, and 10 condoms at 60 kyats. In all cases Kalaw was found to be about a third more expensive than Pyay (Table 4). As shown, public sector basic health staff (BHS) charge little more than drug shops for providing injectables whereas private GPs charge approximately 75% more than either of these providers. The minimum price of daily oral contraceptive pills was considerably cheaper at drug shops than elsewhere, although this may be a result of brand differences.

Table 4
Mean minimum price for specific contraceptive services
by township and type of service provider, kyats (*N*), 2001

	Pyay	Kalaw	BHS	GP	Drug shop	Average
3 month injection	259 (37)	342 (39)	279 (53)	470 (10)	263 (13)	301 (76)
1 cycle daily pills	79 (33)	123 (37)	109 (51)	158 (4)	63 (15)	102 (70)
IUD insertion[a]	432 (11)	613 (16)	556 (26)	-	100 (1)	539 (27)
10 condoms	53 (26)	67 (30)	31 (40)	217 (3)	90 (13)	60 (56)

Note: 710 kyats = US$ 1.
N = providers providing contraceptive services in the past 12 months.
a. IUD = intrauterine device; for drug shops this figure relates to cost of the IUD alone.
Source: Department of Health and Population Council (2002).

4. At the time of the data collection US$ 1 = 710 kyats.

Although the impact of cost on decision to initiate or continue use of contraceptives has not been quantified, it does appear to be an issue of concern to a number of women, and given that there is at least a minimal charge for contraceptives in all sectors, it is likely that the poorest sectors of society may be faced with a considerable barrier. Since the prices are somewhat higher in Kalaw than they are in Pyay, and Kalaw is known to be a less economically wealthy township, this may be a particularly important factor in contraceptive decision making in that township. Recommendations from previous assessments remain valid, with a need for a more systematic evaluation of the impact of cost on access to contraceptive services, and the role that current exemption systems are playing in improving access to contraceptive services for the poor.

2.1.3. Administrative accessibility

Administrative accessibly is the third access issue highlighted by Bertrand *et al.* (1995). They describe this as "the extent to which unnecessary rules and regulations that inhibit contraceptive choice and use are eliminated". There are actually very few rules and regulations associated with contraceptive service provision in Myanmar. The most restrictive of these is that related to the permanent methods of contraception. For a woman to have a sterilization, she has to be at least aged 30, and have at least three living children. If she meets these criteria, she can put in an application to a State/division level sterilization board. Once permission has been received, she can undergo the surgery. Vasectomy is only legally available to men whose wives have received permission to have a sterilization but who are deemed physically unable to go through the surgery. In this situation the man can reapply to the sterilization board for approval for a vasectomy. In the public sector, contraception is officially only provided to married couples. However, no spousal consent or proof of marriage is required. There is no formal regulation of the service provided in the private sector, so no administrative regulations apply to services provided in this sector.

Streamlining of the process for sterilization approval could considerably improve access to this method. One suggestion that should be considered is the decentralizing of the sterilization board from State/division level to township.

2.1.4. Cognitive accessibility

Cognitive accessibility refers to "the extent to which potential clients are aware of the location of service or supply points and of the services available at these locations" (Bertrand *et al.*, 1995). Previous assessments (WHO, 1997; Ministry of Health and UNFPA, 1999) both noted that there are women who are interested in contraceptive use who don't know a source of services. In the survey in Pyay and Kalaw in 1999, women who had heard of specific contraceptive methods were asked what the source of this method might be, assuming that women who hadn't heard of a method wouldn't know the source of the method. Table 5 shows that proportion of women reporting knowledge of specific sources for contraceptive methods. In both townships women were more aware of contraceptives, other than sterilisation, being available in the private than in the public sector. Awareness of availability of contraception in the private sector was greater in Pyay than in Kalaw. Reported knowledge of contraception being available in public sector clinics was very low, although a much higher proportion of women knew that public sector service providers could provide contraceptives outside of the clinic setting (either in the home of the woman, or in the home of the provider).

Table 5
Percent of all survey respondents knowing specific sources of specific contraceptive methods, survey, 1999

	Drug shop		GP		Public clinic		Public provider		Other	
	Pyay	Kalaw	Pyay	Kalaw	Pyay	Kalaw	Pyay	Kalaw	Pyay	Kalaw
3 month injectable	9.6	3.7	64.8	39.9	4.3	17.3	46.2	53.0	0.3	0.6
Daily oral contraceptive	80.9	39.4	29.2	25.8	1.9	10.5	27.3	25.5	0.4	0.6
Condom	15.0	12.5	7.9	9.6	6.3	8.5	7.3	9.6	0.0	0.0
Intrauterine device	1.6	0.3	47.4	20.4	10.9	19.0	36.2	19.8	0.3	0.0
Sterilization	0.1	0.0	13.0	1.4	85.7	70.0	3.3	1.7	0.3	0.0
N	795	353	795	353	795	353	795	353	795	353

Multiple response possible.
Source: Department of Health and Population Council (2000*b*).

Even once a woman has accessed a service delivery point for services other than birth spacing there is not a high level of knowledge that birth spacing services are available at that clinic. In exit interviews with women receiving services other than birth spacing, 19 out of 58 were not able to spontaneously mention that these services can be obtained at the facility, although in the vast majority of cases they were available.

To date in our project, community level advocacy activities have been relatively low key. Following the midterm evaluation in 2001 a set of activities aimed at increasing community awareness of both the importance of reproductive health, and the sources of such services has been initiated, and it is hoped this will show success in improving potential clients' knowledge of the source of services. These activities are being undertaken through the public health staff, but with recognition that for many, private services may be an affordable and more accessible choice. It will be important to undertake such community awareness activities across the country if access is to be significantly improved.

2.1.5. Psychosocial accessibility

Bertrand *et al.* (1995) describe psychosocial accessibility as "the extent to which potential clients are unconstrained by psychological, attitudinal or social factors in seeking out family planning services". Women's and their partner's approval of birth spacing is one issue which may have a limit on their access to services. Women may not be able to raise the necessary financial resources to purchase services and commodities without consultation and approval of their husband. Also, in situations of rural health service provision, where the service provider is often an active and well known member of the community, women may not feel that they could access birth spacing services without the knowledge of their husband. During the survey in 1999, women were asked whether or not they approved of birth spacing, and if they thought their husbands approved. In Pyay, 88.4% of women reported approving of birth spacing, and 77.3% reported that their husbands approved. The respective figures in Kalaw were 74.7% and 69.8%. The sizable minority, a quarter of women in Kalaw, and a little over 10% in Pyay, who disapprove of birth spacing are unlikely to access services. In the rapid assessment, a minority of men and women

were also found to disapprove of birth-spacing. The potential health consequences of contraceptive use rather than moral objections were the main reasons for disapproval of birth spacing. In Pyay there was some discussion about the negative attitudes of family members, in particular in-laws and elders, to birth spacing. The rapid assessment also found that concerns about side-effects featured strongly particularly in discussions among never users of contraception. Other psychosocial factors have not been well documented.

To provide a more conducive community atmosphere for women to access birth spacing services, the community advocacy activities discussed above will not only inform potential clients of the sources of contraception, but will also encourage family members, community leaders and other to be supportive of a woman's choice to use contraception. It would appear that some women are not accessing contraceptive services because of a fear of side-effects. Information on side-effects of contraception and their management therefore needs to be disseminated throughout the community, not just to current users of contraception.

2.2. Quality of care

Bertrand *et al.* (1995) refer to the Bruce-Jain framework for quality of care in family planning, and we use the framework outlined in an article by Bruce (1990) to present quality of care issues.

2.2.1. Choice of methods

"Choice of methods refers to both the number of contraceptive methods offered on a reliable basis and their intrinsic variability" (Bruce, 1990). By providing an appropriate choice of contraceptive methods, the greatest number of clients will be able to use a method that is suited to their social and medical situation. As Bruce (1990) notes, couples pass through many stages in their life when their requirements from a contraceptive may change. At any one time there will be couples who wish to delay their first birth, those who wish to delay their next birth, and those who do not wish to have any more children. Survey data from Pyay indicate that approximately 20% of women of reproductive age have a need for contraception to delay

their next birth, and 65% have a need for a method to limit their family size. In Kalaw the respective figures are approximately 14% and 60%.

Issues such as dual protection from STIs may also be an issue for some clients at some time in their life. Data on STI prevalence and related risk factors is scarce in Myanmar, and there is no specific data available in our two project townships. Perceived and actual experience of side-effects and health impacts of contraceptive use also require that women have a choice of contraceptive methods. Many women in Myanmar, and specifically in the project townships, express a lot of concern about the potential side-effects of hormonal contraceptives, and experience of such side-effects is common (Population Council and Department of Health, 2001).

Four reversible contraceptive methods are theoretically provided through the public sector, three-monthly injectables, oral contraceptive pills, intrauterine devices (IUDs) and condoms. Sterilization is also available to women who meet the necessary criteria and have permission (see above). Together these five methods provide a relatively good balance of long- and short-acting methods, and hormonal and non-hormonal methods. However, previous assessments have indicated that IUD provision is limited, partly because not all basic health staff have been trained and not all clinics have appropriate facilities for providing the services, but also because even trained providers have had little chance to use their skills, and are often nervous of undertaking the procedure. Also, even when other methods are technically provided, stock-outs have been reported to be a common occurrence, therefore limiting the choice of clients.

Data from the midterm situation analysis in 2001 show that short-term methods are provided by more providers than long-acting or permanent methods. Daily oral contraceptives and three-monthly injectables are the methods provided by the most providers (85% and 83% respectively), with condoms being provided by 72% of providers. IUDs are reportedly provided by 38% of providers, and counselling for sterilization and safe period by 56% and 55% respectively (Table 6). Similar data was also collected from the inventory, indicating which contraceptive services are available at each facility (Table 7). The focus on short-term and temporary methods has been noted in other assessments, and is partly the public sector focus on "birth spacing", and partly the infrastructure required for the provision of more long-acting methods.

Table 6
Percent of providers proving specific contraceptive services in the past 12 months, by township and type of provider, 2001

	Pyay	Kalaw	BHS	AMW	CHW	GP	Drug shop	Total
Any birth spacing service	92	98	93	100	88	100	100	95
Daily pills	80	89	88	43	50	100	100	85
Monthly pills	10	11	0	14	0	0	56	10
Progestin-only pills	0	0	0	0	0	0	0	0
Monthly injection	24	2	2	14	0	50	38	13
2-monthly injection	0	0	0	0	0	0	0	0
3-monthly injection	76	89	91	29	13	100	88	83
Intrauterine device	36	40	52	14	13	20	19	38
Condom	68	77	77	14	50	80	88	72
Counselling for:								
Sterilization	54	57	61	71	25	100	19	56
Vasectomy	34	4	21	14	0	50	6	20
Safe period	56	53	70	43	13	90	6	55
Withdrawal	38	28	45	14	13	50	0	33
Lactational amenorrhea	54	51	64	43	13	80	19	53
Modern methods[a]	6	78	39	43	38	40	44	40
N	50	47	56	7	8	10	16	97

a. Counselling for modern methods was only specifically asked in Kalaw.
Source: Department of Health and Population Council (2002).

Table 7
Number of facilities usually providing specific contraceptive methods by type of facility, 2001

	STI clinic	MCH	Station hospital	RHC	SRHC	GP	Drug shop	Provider home
Daily pills	0	3	2	7	7	6	16	11
Monthly pills	0	0	0	0	0	0	8	0
Monthly injection	0	0	0	0	0	2	7	2
3-monthly injection	0	3	2	7	8	7	13	12
Intrauterine device	0	2	2	4	1	0	3	2
Condom	1	3	2	7	4	5	13	8
N	1	3	2	8	8	7	16	18

Source: Department of Health and Population Council (2002).

As mentioned above, responses to the questions regarding whether services are "usually" available hide important information regarding the actual availability of services on a routine basis. In 2001, not one of the public sector facilities visited in Pyay had any oral contraceptives, and most did not have injectables, IUDs or condoms. The situation was considerably better in Kalaw. From discussions with service providers in Kalaw, it would appear that the large stocks of contraceptives is unusual. As the UNDP project was coming to a close, a large supply of contraceptives had been provided for distribution to the pubic sector facilities. It would appear that the situation of contraceptive stocks is generally better in Kalaw than in Pyay, however, with fewer than half of all the public sector facilities reporting that they had ever been out of stock of each of the four main contraceptive methods in the past six months. Very few of the drug shops were out of stock of the contraceptives they reported normally providing.

The main issue raised by this data is the need to ensure that, when providers have been trained and are theoretically providing specific contraceptives, they have contraceptive methods available to provide. This is a particular issue in the public sector, and an issue on which further advocacy is necessary with donors. To improve choice for women who wish to limit their births, expanding the training of providers in IUD insertion would be helpful, but this needs to be combined with continuous in-service and refresher training to ensure that the trained providers are comfortable and able to provide a method that is likely to remain a minority method in the contraceptive method mix in Myanmar.

2.2.2. Information given to clients

"Information given to clients refers to the information imparted during service contact that enables clients to choose and employ contraception with satisfaction and technical competence" (Bruce, 1990). To get data on the information imparted to clients it is necessary to observe service delivery. Such observations were undertaken in Pyay and Kalaw townships as part of the situation analysis in 2001. Because of the low client load at many of the facilities visited, there were very few such observations. In fact, just 19 birth spacing interactions were observed, 14 resulting in the prescription of the three-monthly injectable.

During these consultations generally there was little discussion of the range of contraceptives available to the client. The three-monthly injectable was the most likely method to be mentioned (in 15 out of 19 observations), with daily oral contraceptives, IUDs and condoms being mentioned in six or seven of the consultations. Birth spacing information materials were rarely used – a flipchart was only once used, a poster was referred to in two consultations, and pamphlets on birth spacing methods were used in five consultations. Specific information on hormonal methods for the 16 women receiving such methods was limited, with half or just under being told when to start the method, what changes may occur in menstruation, what side-effects could occur, what warning signs to watch for, and what to do if a pill or injection is forgotten (Table 8).

Table 8
Number of birth spacing provider/client observations
in which specific issues were mentioned, by township, 2001

	Pyay	Kalaw	Total
For all birth spacing observations			
3-monthly injectable mentioned	6	9	15
Daily oral contraceptives mentioned	2	5	7
Intrauterine devices mentioned	2	4	6
Condoms mentioned	2	5	7
Birth spacing information materials used	2	4	6
N	10	9	19
For birth spacing observations resulting in hormonal contraceptive provision			
Told when to start methods	4	4	8
Told changes in menstruation	3	3	6
Told what side effects might occur	4	4	8
Told what warning signs to watch for	4	2	6
Told what to do if forget to take method on time	3	2	5
N	8	8	16

Source: Department of Health and Population Council (2002).

Information provided to contraceptive clients at drug shops was even more limited. The mystery client exercises aimed to get some understanding of this, and the general finding was that very little information was given, and even when specific pieces of information

were requested it was not always complete. For example, if the information had not already been offered, once a specific brand of contraceptive had been chosen the mystery client asked "how shall I use them?". Only one out of the 47 drug shops visited for the purchase of either contraceptives or specifically oral contraceptives spontaneously mentioned when in the menstrual cycle to start the pills, and only one third mentioned this when asked how the pills should be used. Drug shop staff were more likely to tell the woman to take the pill daily, although only 15% gave this information without prompting. Very few drug shop staff specifically mentioned the importance of starting a new pack as soon as the old pack was finished (Table 9). The mystery clients were also requested to ask "what should I do if I forget to take one?" if this information wasn't offered. A surprisingly high proportion (67%) of drug shop staff had mentioned this before the question was specifically asked (although always after the question about how the pills should be used). Eligibility criteria, side-effects and possible warning signs were very rarely mentioned (Table 9).

Table 9
Number of drug shops at which the staff gave specific information, by township, 2001

	Pyay		Kalaw	
	Spontaneous	Requested	Spontaneous	Requested
When in menstrual cycle to start	0	7	1	9
Need to take daily	1	21	6	17
Start new pack immediately	0	4	0	1
What to do if forget one pill	16	1	15	0
Any eligibility criteria mentioned	2		0	
Any side-effects mentioned	2		2	
Any warning signs mentioned	1		0	
N	24		23	

Source: Department of Health and Population Council (2002).

2.2.3. Technical competence

"Technical competence involves, principally, factors such as the competence of the clinical techniques of providers, the observance of

protocols, and meticulous asepsis required to provide clinical methods such as IUDs, implants, and sterilization" (Bruce, 1990). Bruce (1990) notes that although clients are often unable to judge this factor, they bear the consequences. She also notes the difficulty in measuring, assessing and publicizing limitations in technical competence of providers. Given that in Myanmar there is a low prevalence of methods that require a high level of technical competence, to adequately assess issues of technical competence and focused clinical assessment would need to be undertaken. To date this has not been done in the two project townships, and as far as we are aware it has not been undertaken systematically elsewhere in the country.

2.2.4. Interpersonal relations

"Interpersonal relations are the personal dimensions of service" (Bruce, 1990). Bruce (1990) notes that interpersonal relations have a significant impact on clients' satisfaction and the possibility of them returning for repeat services. Data from the exit interviews conducted as part of the 2001 situation analysis show that those women who are accessing services are generally happy with the way the provider treated them. All of the birth spacing clients (recognizing the limited value of this data as only 18 and 15 interviews were conducted with such clients in Pyay and Kalaw respectively) reported satisfaction with services, thought the provider was easy to understand, and had enough privacy. We recognise that there is bias in this data, as the clients interviewed had chosen to use the services, and therefore are more likely to have a favourable view of the services than those who are not using the services. In all the observations of birth spacing service delivery, providers greeted their clients in a friendly manner. During the exit interviews, when a client reported that there was another source of services nearby, the most commonly cited reason for not going to that facility was that the client preferred the provider at the chosen facility.

The measures presented here are not particularly good indicators of interpersonal relations. Bruce (1990) presents findings from a number of qualitative studies of provider/client interactions, which seek to describe the situation in regard to interpersonal relations. To further explore the issue of interpersonal relations, such studies could be considered in Myanmar, although the often low client load provides a challenging environment in which to undertake such studies.

2.2.5. Mechanisms to encourage continuity

Bruce (1990) notes that "mechanisms to encourage continuity can involve well informed users managing continuity on their own or formal mechanisms within the program". In the public sector in Myanmar client tracking systems are used to encourage continuity, and the importance of continuity is explained to the clients during counseling. The impact that these have on client continuation has not been documented, although both method switching and taking breaks from hormonal methods have been noted as quite common in qualitative assessments, primarily because of experience or feared side-effects or health consequences.

2.2.6. Appropriate constellation of services

"Appropriate constellation of services refers to situating family planning services so that they are convenient and acceptable to clients, responding to their natural health concepts, and meeting pressing pre-existing health needs" (Bruce 1990). Providing contraceptive services in the context of other specific services could be a help or a hindrance to clients' access. Bruce notes that the appropriateness of a constellation of services is highly dependent on the perceptions and beliefs of clients and potential clients. In Myanmar, no research has been conducted to look at issues related to what constitutes an appropriate service mix. In our two project townships, as well as providing birth spacing services, most facilities report providing some HIV or RTI services, and both adult and child curative services. All facilities report providing antenatal care (ANC), although delivery services were much more limited (Table 10). However, to assess the appropriateness of this broad approach to service delivery, this information would need to be supplemented with data on attitudes and perspectives of community members.

Table 10
Number of facilities providing reproductive health services, by type of service and facility, 2001

	MCH	STI Clinic	Station hospit.	RHC	SRHC	GP
Birth spacing	3	0	2	7	8	7
HIV/RTI services[a]	3	1	2	6	6	7
Antenatal care	3	1	2	8	8	7
Delivery services	1	0	2	4	4	0
Postnatal care	3	0	2	5	4	6
Immunisation	3	0	1	6	8	0
Adult curative services	2	1	2	8	8	7
Child curative services	2	1	2	8	8	7
N	3	1	2	8	8	7

a. RTI = reproductive tract infection.
Source: Department of Health and Population Council (2002).

2.3. Medical barriers

2.3.1. Outdated contraindications

"Outdated and anachronistic contraindications may be over-zealously applied" (Bertrand *et al.*, 1995). This may exclude some women from using their chosen method, when in fact it could be a suitable method. Basic health staff in all townships providing public sector services have received in-service training in contraceptive service provision, and this training includes a review of the most up-to-date information on contraindications. In the two project townships, Pyay and Kalaw, selected private sector staff also receive this training, but this is not routinely the case in other townships. To assess the application of this knowledge in service delivery it would be necessary to observe service provision. While some provider-client interactions have been observed in the two project townships, adequate information has to be gathered to assess this issue.

2.3.2. Other eligibility barriers

Bertrand *et al.* (1995) note that other eligibility barriers may reduce access of some women to particular methods. These "include both formal and informal prohibitions on the use of particular contraceptive methods that may be related to women's age, their parity or the consent of their spouse". In addition to the formal limitations on sterilization and vasectomy, and on the provision of contraception to unmarried women mentioned above, data collected in the project areas indicate that many providers have self-imposed age and parity limits on the provision of particular methods.

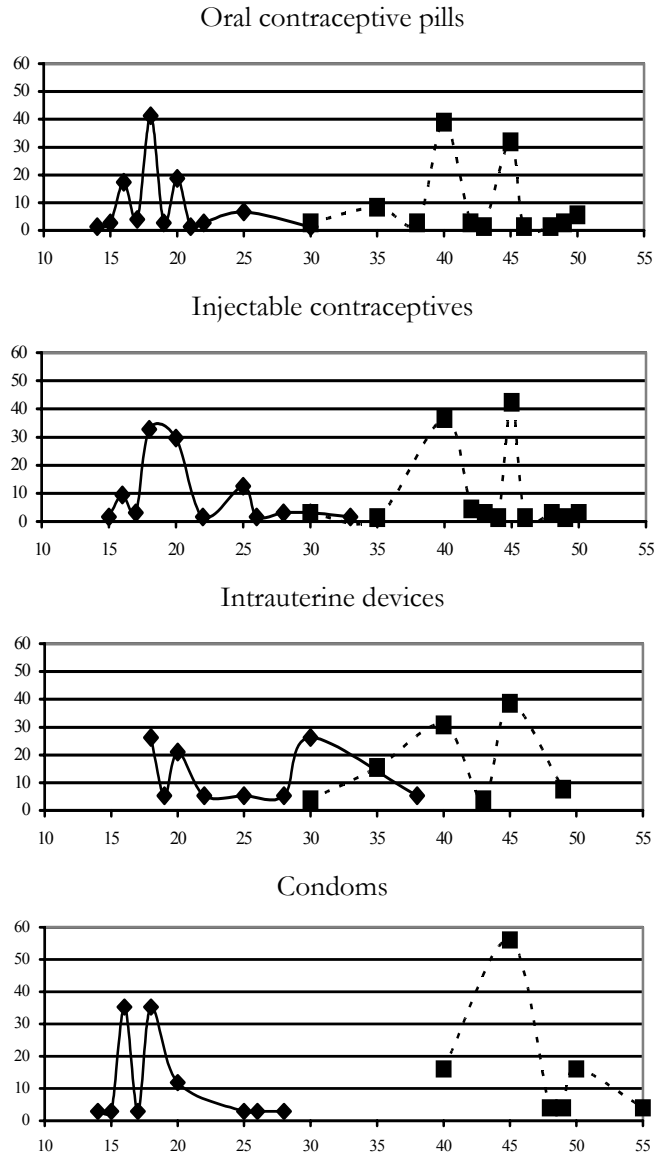
In the situation analysis many providers were found to have a maximum and minimum age, outside of which they would not provide particular methods. For the hormonal methods, around 90% of all providers who provide these methods have a minimum or maximum age for the provision of these methods. This is in contrast to condoms where less than half have a minimum age and close to one third have a maximum age (Table 11). However, when there are maximum or minimum ages for provision of particular methods, these are not highly restrictive. The minimum and maximum ages for each of the methods are shown in Figure 1. The distribution is similar for oral and injectable contraceptives, with mean age ranges of 19 to 42 years and 20 to 43 years respectively. Although the distribution is different, the age win-

Table 11
Providers reporting a minimum age, maximum age, minimum number of children and need to be married for the provision of contraceptives (%), situation analysis, 2001

	Minimum age	Maximum age	Minimum number of children	Provide to unmarried women	*N*
Daily pills	93	89	17	38	82
Injectables	83	92	38	27	78
Intrauterine device	54	74	71	3	35
Condoms	49	36	4	46	69
Sterilisation	62	64	87	0	45

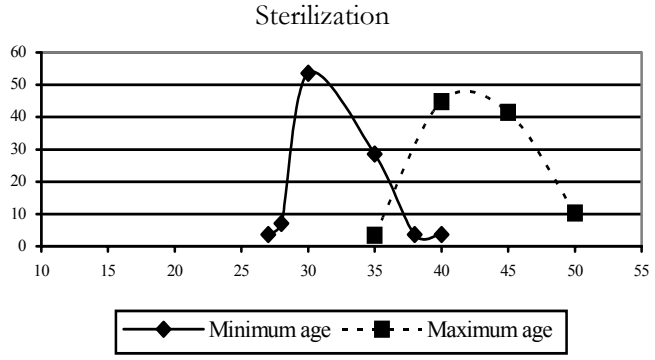
N = providers providing specific contraceptive services in the past 12 months.
Source: Department of Health and Population Council (2002).

Figure 1
Minimum and maximum ages reported by providers
for the provision of various contraceptive methods, situation analysis, 2001



(…)

(…)



Source: Department of Health and Population Council (2002).

dow during which IUDs would usually be provided is also similar, from a mean minimum age of 24 years to a mean maximum age of 42 years. Condoms are available to the widest age range of individuals, the minimum mean age being 18 years and the maximum mean age being 46 years. Sterilisation has the narrowest age band, primarily because of a higher minimum mean age (32 years). The mean maximum age is similar to the other methods, at 42 years.

Continued engagement with service providers could help to reduce the number of providers who will not provide specific methods to younger or older women. From qualitative assessments and research in Myanmar, it appears that age and parity limitations placed on provision of methods is primarily a result of concerns with side-effects and long-term health effects, so focusing on reassuring providers of the low health risks and teaching them to providing counselling and appropriate management of side-effects would be an appropriate strategy to take.

2.3.3. Process or scheduling hurdles

"Process hurdles include physical examinations and laboratory test that clients must undergo in order to obtain contraceptives" (Bertrand *et al.*, 1995). These would not appear to be a great barrier to access in Myanmar. Where providers have been trained in contraceptive service provision, they utilize the medical eligibility criteria set out by WHO, with many of the criteria being assessed verbally. In the observations of birth spacing service provision, two out of the 19 women were weighed,

12 had their blood pressure taken, six had a general physical exam, three had a pelvic exam and one had a breast exam. None of these clients had their temperature taken, or had a pregnancy or blood test.

2.3.4. Service provider qualifications

Bertrand *et al.* (1995) note that service provider qualification include "limitations on the type of personnel who can deliver a certain method, when in fact individuals with less education … can be trained to perform the task". In Myanmar, LHVs and midwives are trained to provide the four official methods, three-monthly injectables, oral contraceptive pills, IUDs and condoms. Voluntary health workers, however, only provide oral contraceptives and condoms. The potential ability of these volunteers to provide more "medical" methods such as injectables is unclear, as is the extent to which this could improve access.

2.3.5. Provider bias

"This barrier includes the practice of favoring some methods and discouraging others in the absence of a sound medical rationale, as well as failing to ascertain and to respect the client's preference" (Bertrand *et al.*, 1995). In the interviews with providers, a number of questions were asked to determine providers' perspectives on the value of specific contraceptive methods for birth spacing or limiting. Approximately 85% of providers said that there are particular methods they would provide for a woman wanting to space her next birth, and for one wanting to limit her family size. However, in most cases a wide range of methods was reported to be provided (Table 12). Table 12 also shows that there are very few methods that most providers would never recommend. The greatest number of providers reported never recommending the monthly methods, which have unproven safety and efficacy. Surprisingly, over a quarter of providers report recommending sterilization as a method of birth spacing, which may indicate a problem in the understanding of this question.

These findings contrast somewhat with qualitative data from the two townships, when many providers said that they believed that women would forget to take daily pills regularly, and would therefore advise women to use injectables.

Table 12
Percent of providers recommending specific methods for women wanting to space or limit their births, never recommending specific methods, 2001

	Recommended for birth spacing	Recommended for limiting	Never recommended
Daily pills	96	34	3
Monthly pills	34	1	84
Progestin-only pills	1	0	8
Monthly injection	10	0	62
2-monthly injection	1	1	30
3-monthly injection	91	47	0
Intrauterine device	73	54	3
Condom	87	36	0
Sterilization	27	79	5
Vasectomy	14	22	8
Safe period	52	17	3
Withdrawal	28	10	2
Lactational amenorrhea	30	7	0
Emergency contraception	0	0	0
Other	8	0	18
N	79	82	63

N = providers reporting particular methods recommended for spacing or for limiting, or never recommended.
Source: Department of Health and Population Council (2002).

2.3.6. Inappropriate management of side effects

"Providers sometimes recommend that a client who is experiencing minor side effects that may or may not be related to the method she is using simply discontinue use of her chosen method, rather than adequately counsel the client and help her manage the side effect" (Bertrand *et al.*, 1995). We have little data from which to assess this issue, although in the study of reproductive morbidities in Pyay and Kalaw, as well as other assessments in other parts of Myanmar (WHO, 1997), experience of side-effects was one of the major reasons for women switching or discontinuing contraceptive use. The extent to which providers are consulted about side-effects, and the support they give to women is unclear. In many cases it would seem that women make the decision to stop or change their contraceptive method be-

cause of side-effects without consulting with a provider. This may indicate that women are not given appropriate information regarding what to expect with regard to side-effects, and not encouraged to return to the provider if they have concerns.

3. Discussion

As discussed by Bertrand *et al.* (1995), there is a wide range of factors affecting access to and quality of reproductive health services. In our review of data available from the project *"A Township Model for Improving Quality of Care in Reproductive Health Services in Myanmar"*, we find that using the model proposed in this paper, there are a number of areas in which we have adequate information to inform programme development, and other areas where such information is scarce. Here we briefly discuss some of the programmatic recommendations and where relevant how our project is addressing these issues. We also highlight the gaps in information, propose areas for future research, and discuss some of the constraints to data collection.

A number of the access related issues identified would require changes in policy or implementation at the central level. For example, at least in some townships, difficult geographic access to services is a major barrier to women using contraceptives. However, interventions to improve this situation will not be easy to implement at the project or township level, as they are likely to require systemic changes in the way services are provided. To address this issue there may need to be a shift from the focus of providing services in the facility with limited outreach services, to the focus being on the provision of services in the community. This may require additional support in terms of the number of staff providing services, particularly in rural areas. Issues of administrative accessibility will also need to be addressed at the central level, particularly when increasing access would involve a change in policy or procedures such as for the streamlining of the sterilization approval process. Putting in place systems that will ensure that the poor have access to safe and effective methods of contraception will also require central level initiation, although they could be implemented on a township or even clinic level. Other issues such as increasing the availability of contraceptive commodities will require fund

mobilization, either at the central government level, or through international donors.

Other access issues could be addressed at the township level, and it is generally these issues that are being addressed within the scope of the project *"A Township Model for Improving Quality of Care in Reproductive Health Services in Myanmar"* in Pyay and Kalaw. As mentioned above, there are a number of potential clients of birth spacing services who may not be using contraception because they do not know where such services are provided. Although probably a small minority of women, others may feel constrained by personal and societal attitudes towards the use of contraception. Both of these issues can be addressed through community level advocacy activities. Within the project, basic health staff and voluntary health workers are using an advocacy booklet in discussions with community leaders to raise awareness of reproductive health issues in the hope of producing a more conducive environment for potential clients to seek out and utilise services.

The project also has a health services component that is beginning to address some of the access issues related to quality of care. The project has developed training curriculum for basic health staff, auxiliary midwives, community health workers, private GPs and drug shop staff. The focus of the training curriculum is on birth spacing and RTIs, but issues related to emergency contraception, abortion, safe motherhood, adolescent reproductive health and men's role in reproductive health have been included. The training is client-oriented and aims to strengthen client counselling through the use of role-play techniques. One round of training took place in 2000, and refresher training is currently underway. By updating the knowledge and skills of providers it is hoped that there will be an improvement in quality and access issues such as the information given to clients, and their interpersonal relations with clients. The training is also an opportunity to update providers' knowledge in terms of contraindications and the management of side-effects, and to discourage provider bias in contraceptive method choice and inappropriate limitation of access to contraception based on age, parity of socio-economic groups.

Within the Bertrand *et al.* (1995) model there were a number of issues that we did not have sufficient information to assess, either in the two project townships, or in Myanmar more generally. Most of these are related to the actual content of service provision, and the relationship between providers and clients. While important informa-

tion was identified during the survey and in-depth interviews, to adequately address issues such as the technical competence of service providers and the interpersonal relations with clients, client/provider interactions need to be observed. As part of the data collection for both baseline and midterm in our project we have included a number of observations of service delivery. However, because of relatively low client loads and the limited time available for fieldwork, only very few such observations were conducted. Although this gives some indication, there is not sufficient data to allow strategic decisions to be made to improve the quality of services. While such information would be valuable for programme planning, the logistical barriers to data collection may make this particularly difficult.

On the other hand, there are other gaps in the available data on access and quality of care that may be more easily addressed. Further analysis into the role that cost factors play in a woman's choice to use contraceptives and in her selection of specific methods or service providers is one such area. Looking in more detail into women's demands and expectations regarding the constellation of services provided is another.

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