Study of unmet need for family planning in Dar Assalam, Sudan 2001

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دراسة الحاجة غير الـمُلَبَّاة لتنظيم الأسرة في دار السلام، بالسودان، في 2001

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الخلاصـة: استهدفت هذه الدراسة الوصفية الوقوف على حجم الحاجة غير الـمُلَبَّاة لتنظيم الأسرة بين النساء اللاتي هن في عمر الإنجاب (19 — 49 عاماً) في دار السلام. وتم من خلال استبيان مفصَّل دراسة 530 امرأة من المتزوجات أو ممن سبق لهن الزواج، تم انتقاؤهن عشوائياً بطريقة أخذ العينات على مراحل متعددة. وبيَّنت الدراسة أن نسبة استخدام موانع الحمل هي 21.3٪. وبلغت الحاجة غير الـمُلَبَّاة، التي تم تقديرها بحسب نموذج «وستوف» Westoff 30.7٪. وكانت حبوب منع الحمل هي الطريقة الأكثر شيوعاً (92٪). وبلغت المعرفة بوسيلة واحدة لمنع الحمل 61.3٪، في حين بلغت المعرفة بوسيلتين أو أكثر 23.4٪. وقد تم الحصول على المعلومات من الأقارب بصورة رئيسية (48.6٪).

ABSTRACT In this descriptive study, the main objective was to determine the magnitude of unmet need for family planning among women of child-bearing age (15–49 years) in Dar Assalam. Using a detailed questionnaire, we studied 530 ever-married women selected randomly through a multistage sampling technique. Current use of contraception was 21.3%. Using the Westoff model, unmet need was 30.7%. Contraceptive pills were the most commonly used method, 92%. Knowledge on contraception was 61.3% for a single method and 23.4% ≥ 2 methods. Knowledge was obtained mainly from relatives, 48.6%.

Étude des besoins non satisfaits en matière de planification familiale à Dar Assalam (Soudan), 2001

RÉSUMÉ Dans cette étude descriptive, l'objectif principal était d'examiner l'ampleur des besoins non satisfaits en matière de planification familiale chez les femmes en âge de procréer (15-49 ans) à Dar Assalam. À l'aide d'un questionnaire détaillé, nous avons étudié 530 femmes ayant déjà été mariées, choisies au hasard par technique d'échantillonnage à plusieurs degrés. L'utilisation de la contraception au moment de l'étude était de 21,3 %. Mesurés au moyen du modèle de Westoff, les besoins non satisfaits étaient de 30,7 %. La pilule contraceptive était la méthode la plus couramment utilisée (92 %). Les connaissances sur la contraception étaient de 61,3 % pour une seule méthode et de 23,4 % pour deux méthodes ou plus. Les connaissances étaient obtenues principalement auprès de parents (48,6 %).

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Introduction

Family planning is an important strategy in promoting maternal and child health. It improves health through adequate spacing of birth and avoiding pregnancy at high-risk maternal ages and high parities. Family planning services became publicly available in the 1960s. In Sudan, services were initiated in 1965 and in 1985 were integrated into the primary health care system. Yet, utilization rates, 9% current use and 24% ever use, are among the lowest in the world [*1*]. These low rates may be the result of poor acceptance, inadequate knowledge or inaccessibility of the services in a community that is large and of such diverse cultural backgrounds [*2*]. The low levels of utilization may reflect an unmet need for family planning in the Sudanese population, which necessitates scientific documentation.

We aimed to assess the magnitude of unmet need for family planning and knowledge of contraception in Dar Assalam. Unmet need means "the percentage of fecund married women who are not using an appropriate method of contraception even though they do not want to get pregnant" [*3*].

Methods

Khartoum state was chosen for this study. It is divided into 3 regions: Khartoum, Khartoum North and Omdurman. Omdurman was randomly selected for the study. In the second stage, Ombada was randomly selected from the 3 provinces in Omdurman. Ombada is subdivided into 3 localities, Alamir, Abugaa and Dar Assalam, which was randomly selected for this stage. Dar Assalam is a new peri-urban area in Omdurman with a total population of 234 000, mainly the result of migrant flow from war and natural disasters.

We carried out a descriptive cross-sectional study on 530 ever-married women of childbearing age (15–49 years), selected randomly through a multistage sampling technique (8 women were excluded from the original 538 selected because their questionnaires were incomplete).

Official clearance for the study was obtained from both federal and Khartoum state ministries of health.

The health centre is the main health service provider in the area, providing services for 45.8% of the population. Medical assistants provide 78.1% of services and the health visitor provides the other 21.9%. Supplies are received from the maternal and child health and family planning services and the Sudan Family Planning Association. Only a few of the medical assistants in the study area had undergone a training programme on family planning. We selected 2 health centres in Dar Assalam, 1 primary health care unit and 1 operated by a nongovernmental organization.

Data were collected on 10 working days (08.00 to 14.00), 1 day per week over a 10-week period in 2001. Each woman was interviewed using a detailed, standardized, precoded questionnaire after informed consent was obtained. Information collected included demographic data, use and knowledge of contraception, family size and birth spacing.

Data were analysed using *SPSS*. Unmet need was calculated using the Westoff model, developed by Charles Westoff, which is widely used as the standard to measure unmet need [*3*]. In this formulation, the unmet need group included: all fecund women who were married or living in union, sexually active, not using any method of contraception and not wanting to get pregnant or wanting to postpone their next birth for at least 2 years; all pregnant married women whose pregnancies were un-

wanted or mistimed because they were not using contraception; and amenorrhoeic women or pregnant women whose current pregnancy or recent birth was unintended and they did not want to have any more children.

In accordance with the Westoff model, those in our study sample not using contraception were classified into 2 groups: pregnant or amenorrhoeic and non-pregnant or non-amenorrhoeic.

The pregnant or amenorrhoeic women were classified by whether:

- their pregnancy was intentional (desired): these women did not have unmet need;
- their pregnancy was unintentional (earlier than desired; some may have experienced contraceptive failure, all were in need of a method of spacing births): they had unmet need (women using contraception at the time of the study were excluded);
- their pregnancy was not wanted at all at the time: they had unmet need for family planning; they needed a method to prevent further births.

Non-pregnant or non-amenorrhoeic women were classified as fecund or infecund. The infecund were not at risk of pregnancy and were not in need of family planning. They included women who had no births for at least 5 years although they were not using contraception. They also included those who had secondary amenorrhoea for at least 6 months and were not pregnant. Widows and separated women were also included in this group.

The fecund were classified by whether:

- they wanted pregnancy soon: these women did not have unmet need;
- they wanted no more pregnancies: they had unmet need;
- they wanted pregnancy later: they also had unmet need.

Results

The study sample was a relatively mixed group of women from different tribes and from different parts of Sudan. Of the 530 participants, 493 were currently married, 16 were widowed and 21 were separated/divorced. Literacy was 46.2% for the women in the study group (64.5% for their husbands). Concerning knowledge of modern methods of contraception, 61.3% knew ≥ 1 method and 23.4% knew ≥ 2 methods. Only 50 (9.4%) had never heard of contraception. Their knowledge was mostly obtained from relatives, 48.6%. Level of knowledge obtained from medical personnel was low: 23.7% from health visitors, 10.1% from midwives and 3.1% from doctors (Table 1).

Ever-use of contraception was 33.0%, current use was 21.3% and 59.1% of the study sample stated they would like to use family planning. Contraceptive pills were the commonest method in use in the study area, 92.0%. In spite of their availability, condoms and local foaming tablets were not used. The intra-uterine contraceptive device was not available in the health service area.

Just over half the participants, 59.1%, said they desired a big family of > 5 chil-

Table 1 **Distribution of women in the study sample who knew about family planning according to source of knowledge**

Source of knowledge	No. (*n* = 325)	%
Relatives	158	48.6
Health visitor	77	23.7
Mass media	35	10.8
Midwife	33	10.1
School	12	3.7
Doctor	10	3.1

dren, 38.1% wanted 4–5 children and only 2.8% said they would like a small family of ≤ 3. There was a significant association between family planning use and desired number of children ($\chi^2 = 26.17$; $P < 0.001$) (Table 2). There was also a significant association between family planning use and education status ($\chi^2 = 22.96$; $P < 0.001$) (Table 3).

About 39% of the women in our sample did not know whether the health centre provided family planning or not (perceived availability). Village midwives provided family planning services to 8.5% of the population.

Using the Westoff model, unmet need was estimated at 30.7% (Figure 1).

Discussion

In this mixed sample, knowledge on family planning, 61.3%, was consistent with that reported in the 1989/1990 demographic and health survey, 71.4% [*2*]. It is, however, higher than that found by the Sudan Family Planning Association, 1978–80, 50.8% [*4*] and the safe motherhood survey of 1999, 54% [*5*]. These differences may be due to regional variation or efforts exerted by the Sudan Family Planning Association and mother and child health/family planning programmes during the past 20 years.

Knowledge gained from relatives may be deficient regarding information about methods, their use, complications and relation to future pregnancy. The low level of knowledge gained from medical personnel may reflect lack of proper training of medical service providers in the study area. Ineffectiveness of the mass media in delivering knowledge (10.8%) may be related to illiteracy, unavailability of mass media or lack of simple family planning messages on family planning use and birth spacing.

Contraceptive pills were the commonest method in use in the study area. This may be because of their availability, affordability, repute and the perception by users that they produce only minor complications. However, the non-use or unavailability of other methods would affect the choice. The current use rate (21.3%) is higher than that found in the 1990 demographic and health survey, 9%, [*2*] and the safe motherhood survey of 1999, 5.4%, [*5*] for the whole country. In comparison, it has been reported that 50% of married women in Brazil, China, Colombia and Costa Rica were using a modern method of contraception [*6*].

Table 2 **Relationship between desired number of children and family planning use among married women of reproductive age 15–49 years in Dar Assalam, 2001**

Desired number of children	No. non-users (*n* = 417)	No. users (*n* = 113)	Total (*n* = 530)
≤ 3	8	7	15
4–5	140	62	202
> 5	269	44	313

χ^2 ***= 26.17;*** P ***< 0.001.***

Table **3 Relationship between female education and family planning use married in women of reproductive age 15–49 years in Dar Assalam, 2001**

Education level	No. non-users (*n* = 417)	No. users (*n* = 113)	Total (*n* = 530)
Illiterate	246	39	285
Elementary school	144	58	202
Secondary school	27	16	43

χ^2 ***= 22.96;*** P ***< 0.001.***

Unmet need of 30.7% is consistent with that reported in the 1990 demographic and health survey, 28.9% [*2*]. In most surveyed countries, unmet need for family planning ranges between 20% and 30% of married women of reproductive age [*7*]. It is 11% in Thailand, 36% in Kenya and 37% in Rwanda [*8*]. In our study, unmet need was mainly for spacing of birth rather than limitation. Those who wanted no more children were more easily convinced or satisfied to use family planning than those who wanted to have children at some time in the future. Those who wanted children were influenced by the number and sex of their surviving children. Our findings may help in calculating the potential demand for contraception, by adding current use to total unmet need.

It is not easy to discuss why women with unmet need do not use contraception. Reasons may change or may not be well

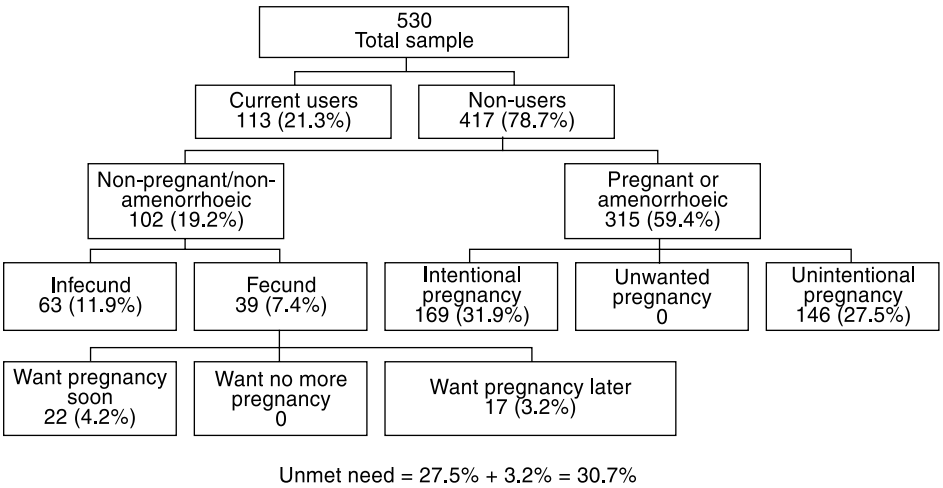

Figure 1 **A schematic representation of family planning use in a sample of ever-married women in Dar Assalam, 2001 (Westoff model)**

defined. Many women may not state their real reason for non-use, e.g. husband's opposition [*9*]. Focus group discussion may reveal attitudes and opinions and may help to explain unmet need. The possible reasons behind unmet need can be summarized as: lack of good information on family planning, difficulties with access to and quality of family planning services and supplies, desire for children and lack of community participation. Inaccessibility includes lack of supplies, non-availability of preferred method, personal cost, travel time and monetary outlay. Knowledge of availability (perceived availability) is as important as knowledge on family planning and is even more important than the woman's level of education [*10*].

Conclusion

Unmet need for family planning is still high in spite of the high level of knowledge on family planning. This knowledge may be deficient or it is possible that family planning services are not accessible, unaffordable or not acceptable to those with unmet need.

Recommendations

Unmet need could be reduced by providing an integrated family planning service and through the collaboration of service providers with other medical and social service providers in the area, e.g. school teachers, social workers, women's union leaders and religious leaders. Training of providers on information, counselling and distribution of family planning services could be included. Community-based distribution could be improved by expanding the role of village midwives and female teachers. Encouraging female providers would minimize social barriers.

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There are still some 123 million women around the world, mostly in developing countries, who are not using contraception in spite of an expressed desire to space or limit the numbers of their births. An estimated 38% of all pregnancies occurring around the world every year are unintended.

A woman's ability to space or limit the number of her pregnancies has a direct impact on her health and well-being as well as the outcome of her pregnancy. In enabling women to exercise their reproductive rights, family planning programmes can also improve the social and economic circumstances of women and their families.

The reasons why family planning needs are often not met are varied, but include: poor access to quality services, a limited choice of methods, lack of information, concerns about safety or side-effects and partner disapproval. WHO is currently addressing some of these needs in working to help:

- improve the safety and effectiveness of contraceptives methods;
- widen the range of family planning methods available to women and men.

Further information about WHO's work in the area of family planning can be found at: http://www.who.int/reproductive-health/family_planning/index.html