

## Unmet need for family planning

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The concept of unmet need has been used since the late 1970s to indicate the gap between the desire to stop or delay childbearing and women's contraceptive behavior. Women who respond that they want to postpone (spacing) or avoid childbearing (limiting) and also that they are not using contraception (including use by their partners) are defined as having an unmet need. In this paper an attempt will be made to ascertain the prevalence rate of unmet need for family planning among married women aged 15-49 years, and to find the relationship between unmet need and selected characteristics of the woman. A household survey was carried out in 1997<sup>1</sup> with the aim of collecting data on ever-married women in the age group 15-49 years. A 2-stage sampling procedure was applied to insure the representativeness of the sample. Out of 5765 eligible women, only 5548 were successfully interviewed (96%). A questionnaire was used as an instrument for the survey. The survey shows that unmet need for spacing was 7.4% and it was 6.8% for limiting (totalling 14.2%). The unmet need for spacing was inversely related to age of the woman ranging between 18.3% in the age of 15-19 years to less than 1% in women aged 45-49 years. The unmet need for limiting was highest in the age group 40-44 years (13.3%) and it was zero in the age group 15-19 years. It was also observed that unmet need for spacing was high in rural areas (11%), in the south (11.2%), and in women with better education. The unmet need for limiting was high in the following groups of women: 40-44 age group (13.3%), living in rural areas (7.7%), living in the south (9.8%), and in women with no education (15.1%). The total unmet need for family planning was high in the following groups of women: age group 15-19 years (18.3%), rural women (18.7%), southern women (20.9%), and in women with no education (20.2%) (Table 1).

In all developing countries, except China, approximately 20% of married women of reproductive age have an unmet need for family planning.<sup>2</sup> The situation in Jordan in this study looks better than many of the developing countries with few exceptions. Prevalence of total unmet need is 14.2%, which is, to some extent, divided equally between spacing and limiting. Levels of unmet need vary according to women's characteristics such as age, residence, and education of the woman. The most unmet need for spacing births is in young women. This is because younger women want to have more children as early as possible. Among older women, the most unmet need is for limiting births. This is because older women have had as many children as they want, or even more. Better-educated women have less unmet need than women with little or no education. It is noteworthy

**Table 1** - Percentage of women with unmet need for family planning by selected background characteristics, Jordan, 1997.

Characteristics	Unmet need		Total unmet need (%)
	for spacing (%)	for limiting (%)	
<b>Age in years</b>			
15-19	18.3	0	18.3
20-24	14.4	1	15.4
25-29	10.4	3.3	13.7
30-34	7.5	7.2	14.7
35-39	3.7	9.6	13.3
40-44	1.1	13.3	14.4
45-49	0.2	11.6	11.8
<b>Residence</b>			
Urban	6.7	6.6	13.3
Rural	11	7.7	18.7
<b>Region</b>			
North	8.5	7.2	15.7
Central	6.6	6.3	13
South	11.2	9.8	20.9
<b>Education level</b>			
No education	5.1	15.1	20.2
Primary	6.9	10.9	17.8
Secondary	7.9	5.6	13.5
Higher	7.3	3.7	11
<b>Total</b>	<b>7.4</b>	<b>6.8</b>	<b>14.2</b>

that prevalence of unmet need in Jordan is increasing with the decrease in level of education, ranging between 20.2% in non-educated women to 11% in highly educated women. Less educated women probably have more obstacles to using contraception than more educated women. In most countries, unmet need is greater in rural areas than urban areas. In our study prevalence rate of unmet need is 18.7% in rural areas as compared to 13.3% in urban areas. Results of our study regarding the area of residence and education of the woman are consistent with the findings of the KAP study in Jordan in 1996,<sup>3</sup> but the prevalence of unmet need in the KAP study is higher in all subgroups of residence and education.

Establishing a link between family planning services and other health services might be needed to identify high-priority groups of women who have an unmet need for family planning. One of the approaches to increase the use of contraceptives is to provide family planning counseling at every health service contact between the woman and health care provider. In general, improving access to health services, enhancing knowledge of contraceptive methods, overcoming husbands' and family opposition to the use of contraceptives; and addressing concerns and myths about family planning; are some of the steps that might be needed to address the problem of unmet need for family planning. Further studies are needed to explore this important issue taking into account other variables and characteristics that may predict the behavior of a woman to use contraceptive methods.

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## Does tuberculin skin test predict tuberculosis in patients with end-stage liver disease?

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The incidence of tuberculosis (TB) after solid organ transplantation has been reported to be between 1-4%. As a screening test for TB, tuberculin skin test (TST) has been utilized in cases evaluated for liver transplantation (LT). A recent study reported that 16.8% of LT candidates in the period from 1988-1998 had positive TST, and TB was reported in 1% of cases who underwent an LT. Tuberculosis is known to complicate LT, as LT has unheralded risk factors for the development of TB as of possible reactivation of latent infection or primary TB in immunosuppressed host. Despite the increasing risk of active TB in transplanted patients, there is no consensus regarding the appropriate treatment of asymptomatic TB infection in this category. The Kingdom of Saudi Arabia (KSA) is a country with an intermediate prevalence of TB. In a nationwide community survey of TB epidemiology in KSA, the prevalence of a positive TST among the Saudi population was 30%. In this setting, the action based on a TST in end-stage liver disease (ESLD) is somewhat controversial.<sup>1,2</sup> The objective of this paper is to study the prevalence and value of a positive TST on patients assessed for LT and the prevalence and value of a TST in cases with ESLD evaluated for LT.

We did a retrospective chart review of patients with ESLD referred for LT evaluation at the King Fahad National Guard Hospital, Riyadh, KSA. All patients evaluated in the period between 1994-1997 were studied. The inclusion criteria are 1. Patients with ESLD referred for LT, 2. Tuberculin skin test carried out at the time of evaluation, and 3. Follow-up period for at least 12 months or TB disease development within 12 months. Numbers were expressed as mean  $\pm$  standard deviation. Whenever there was data in 2x2 table, Chi Square was used as appropriate.

The liver transplantation program evaluated 260 patients with ESLD in the period from 1994-1997. Tuberculin skin test results were available for 160 patients (61.5 %). Forty-two patients had positive TST with a prevalence of 26.3%, while the prevalence of a positive TST in a nationwide wide survey among Saudi patients was 30% ( $p=0.21$ ).<sup>4,5</sup> One hundred and nineteen patients (74.4%) met the inclusion criteria. Of those 119 eligible patients, 31 had positive TST (26.1%). The mean age was 46.6 years ( $\pm 16.9$ ) with a male to female ratio of 1.4:1. The etiology of liver cirrhosis was as follow: Hepatitis C virus in 77 patients (64.7%), Hepatitis B virus in 5 patients (4.2%), and others etiologies for the remaining 24 patients (21.1%). The follow-up period was 26.4 months ( $\pm 18.4$ ). The outcome of eligible patients at the time of data analysis was as follows: 45 (37.8%) were transplanted, 50 (42%) had not yet have the transplantation, and 24 (20.2%) died while on the waiting list. Among the 45 patients who underwent LT, 15 (33.3%) had a positive TST. Of the 75 patients who did not undergo an LT, 16 (21.3%) had a positive TST ( $p=0.065$ ). Of the 31 patients with a positive TST, 2 (6.5%) developed tuberculosis, while the other 2 (2.3%) with negative TST developed tuberculosis. Four patients (3.4%) developed tuberculosis, one patient was transplanted, and 3 were not. Only 3 patients (9.7%) with a positive TST had isoniazid prophylaxis and one developed drug-related hepatitis.

We conclude that TB is preventable when there is a high degree of suspicion in endemic areas. Most of the cases could be diagnosed promptly with appropriate investigation. Though a TST in our study did not predict the development of TB in ESLD, it should raise suspicion for the development of TB in the future and warrant the use of TB prophylaxis after transplantation in LT candidates.

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