THE TREND IN INDUCED ABORTION IN MEXICO, A HIGH PREVALENCE CONTRACEPTIVE COUNTRY

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ABSTRACT

JUSTIFICATION

Mexico has experienced many changes in the last decades. From 1970 to 2000, the population size doubled, urbanization has proceeded rapidly and 75% of the population is now urban, women's education level has increased, from only 5% having completed high school or higher education in 1970 to 27% in 2000 (INEGI 1970 and 2000). These changes have been accompanied by a large decline in total fertility (from 5.6 in 1976 to 2.3 children in 2006) and a steady increase in the contraceptive prevalence, from 25% in the late 1970s to just over 70% in 2003), and most use is of modern methods although with marked variation across the country (SPP-IISUNAM, 1979; SSA-CRIM-UNAM, 2003; Juarez, 2006). Estimates of 1995 and 2006 indicate that around 20% of single young adolescents aged 15-19 have initiated sexual activity with almost no use of contraception (Mendoza, 2006). Though these social, structural, and demographic changes have had a positive impact on women's life, unplanned pregnancy remains a serious problem in Mexico as in most of the developing world.

Despite the high levels of contraceptive prevalence, in 2000 12.1% of Mexican women had unmet need for contraception (CONAPO, 2000). Many others used effective methods incorrectly (especially the pill) (AGI, 1994; Juarez, 2007). Other factors that reduce the effectiveness of use of modern contraception and the high level of unwanted pregnancies are access barriers, unwanted and involuntary sexual relations, concern about side effects, partner's opposition, or the posture of the Catholic Church (Langer and Espinoza, 2001). And many of these unwanted pregnancies end in abortion.

Legislation about abortion varies by state within Mexico, but for the country as a whole the procedure remains highly restricted by law (Lara, Klein, García and Becker, 2003). Nevertheless, clandestine abortions are prevalent and pose a serious risk to maternal health. However, because of the difficulty of estimating its level and the stigma and sensitivity that surrounds the issue, it is for the most part an invisible problem, and the negative consequences of unplanned pregnancies and of illegal and unsafe abortion have been largely neglected.

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For the case of Mexico, until the present, the only reliable national estimate of abortion incidence that is available is for 1990: 533,100 induced abortions were estimated to occur in that year, representing an annual rate of 23 per 1,000 women in reproductive age (Singh and Wulf, 1994). The number of abortion complication cases treated in hospitals was estimated to be 106,600 in that year (Singh and Wulf, 1994). In 1998, it was estimated that abortion-related causes accounted for 7.8% of Mexican maternal mortality (INEGI, 2001).

These data as well as recent research, suggest that abortion incidence may have changed since 1990. The National Demographic Surveys of Mexico (ENADID 1993, 1997 and 2006) show large regional and urban rural differentials in contraceptive use and unmet need: for example in 2006, in urban areas unmet need was close to 10% while in the rural areas it was over twice this level. Differential access to family planning services is likely to result in differential levels of contraceptive use and induced abortion in the country. Another factor is that though Mexican governments have been strong supporters of modern contraception and universal access to family planning, policies of the conservative PAN party that has been in office in the last seven years have resulted in a deterioration of the family planning program and a quiet but strong movement towards reducing provision of modern contraceptives throughout Mexico. These modifications are likely to result in an increase in unplanned pregnancies and consequently, induced abortions. A further factor is that from small-scale studies and anecdotal knowledge, we expect that the provision of induced abortion services has changed substantially since 1990 -- partly through greater availability of misoprostol or Cytotec, and partly through greater access to provision of abortion by medical professionals, with organization and with increased training in the manual vacuum aspiration procedure (Lara, Klein, García and Becker, 2003). This is so despite the fact that there have been few changes in the legal status of abortion, with the exception of Mexico City, where earlier this year laws were reformed to permit first-trimester abortion on demand.

OBJECTIVES

Because of the many changes that have occurred in the country in the past 15 years, new research to document the level of induced abortion is greatly needed. The aim of this study is to estimate: a) the number of women who have been hospitalized each year during the period 2006 for the treatment of complications following unsafe induced abortions, b) the total number of women having induced abortions each year (including women who experience no complication for the procedure, those who have complications and do not obtain medical care in hospitals, and those who have complications and obtain medical care in hospitals), and c) the incidence of induced abortion (rate and ratio) at national and regional levels. These new estimates will be compared with 1991 estimates that employed the same methodology that will be applied in the present study, to assess change in the level of induced abortion over the past decade and a half.

DATA AND METHODOLOGY

Reliable estimates of abortion incidence are difficult to obtain because of the illegal status of abortion in many countries of the developing world. For example, underreporting of abortion is very high in face-to-face surveys, and other approaches (for

examples representative surveys of abortion providers) are not feasible in the context of countries where abortion is illegal. As a result, a number of methodologies have been developed in order to provide reliable estimates of abortion incidence (Rossier, 2003). The present study will apply an indirect estimation methodology that was developed by one of the co-authors in the early 1990s and is documented elsewhere (Singh et al, 1994). This particular methodology has been widely applied (in over 12 countries) with robust results across countries and over time. In the case of Mexico, we will develop estimates of abortion incidence at the national and regional levels for the year 2006.

The two main sources of data for the measurements needed for implementing this method are: (a) national hospital discharge data on the number of women hospitalized in 2006 for treatment of abortion complications; and (b) a Health Professionals Survey (HPS) - a survey of a broad range of key informants who are knowledgeable about abortion provision in the study country, to provide an estimate of the proportion of women having abortion who are hospitalized for treatment of complications.

Hospital discharge data: we have obtained data from each of the nine separate hospital systems that exist in Mexico, for the years 2002-2006. These hospital systems are: IMSS (Instituto Mexicano de Seguridad Social); ISSSTE (Instituto de Seguridad y Servicios Sociales de los Trabajadores del Estado); PEMEX (Petróleos Mexicanos); SEDENA (Secretaría de la Defensa Nacional); SEMAR (Secretaría de Marina); Estatales (State Hospitals); SA (Secretaría de Salud); IMSS Oportunidades (Social Security for people below the poverty line) and Universitarios (University Hospitals). We are currently assessing the quality of these data, examining internal consistency across years and through interviews with key health officials in charge of data management.

A Health Professional Survey has been carried out, starting in late 2006 and completing in September 2007. 125 professionals have been interviewed in five states of Mexico, distributed across the country to capture regional variation. The dates are currently being processed and analysis will begin shortly.

The steps in the analysis are:

- Estimation of the number of women who were hospitalized for treatment of a spontaneous abortion, to separate this group from the total number of women hospitalized for abortion complications, yielding the number who were treated for complications resulting from induced abortion.
- Estimation of the proportion hospitalized, among all women who had induced abortions, based on data from the HPS, which yields an estimate of the proportion who experienced complications, and of these women the proportion who were hospitalized. As mentioned above, some women who have had an abortion either do not need or do not obtain hospital treatment, and we need to know what proportion these two groups constitute of all women having induced abortions. A multiplier is developed based on the HPS data, and is used to adjust for induced abortion occurring without hospitalization, and the product of the number of women treated in hospital for induced abortions times the multiplier produces an estimate of the total number of induced abortions in 2006.

- Based on the above estimates, the abortion rate and ratio at the national and regional levels are calculated.
- The new estimates obtained for 2006 will be compared with 1990 estimates that used a similar methodology, to assess changes in abortion incidence, 1990-2006.

Currently data processing has been initiated and data analysis will start on October. The paper will be completed by February 2008.

RESULTS

Results are not yet available, as discussed above. One key data item that is available is the total number of women treated in hospital for any abortion complications in recent years:

2002	2003	2004	2005
158,632	161,807	168,989	172,078

Note that this total has not yet been adjusted for misreporting or for omission, steps that are yet to be implemented. Also, it includes spontaneous abortion cases, likely to be approximately 20-25% of the total number treated.

IMPLICATIONS FOR POLICY

The new estimates will allow us to verify if the level of induced abortion has changed in a context where many developmental, social and demographic changes have occurred and where the right wing government in power since seven years ago has diminished the importance of the family planning program.

We hope that findings will stimulate research, policies and programs to promote advances in methodology and improve prevention of unplanned pregnancy and reduction of unsafe abortion.

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