



Annotated Bibliography – Abortion Research in Ethiopia

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Michael Vlassoff & Alison Gemmill

1. Abdella A. 1996. Demographic characteristics, socioeconomic profile and contraceptive behaviour in patients with abortion at Jimma Hospital, Ethiopia. East Afr Med J. Vol. 73(10): 660-664.

- This is a hospital-based study of women admitted for post-abortion care (PAC) in 1992-1993. 53% of the cases were induced abortions (using the WHO definition of “definite induced”) while 47% were spontaneous abortions. Women with induced abortions were younger (66% were under age 25) than spontaneously aborting women (53%).
- 71 % of women with induced abortions had secondary education, 31% were students, 49% were unmarried (whereas 89% of the spontaneous-abortion women were married). Also, 67% of these women were of parity zero or one, and 69% had had a previous abortion (whereas only 16% of women with spontaneous abortions had had a previous abortion).
- This study looked at all “abortion admissions” to the obstetric/gynecology department of Jimma Hospital (Jimma is a major town located 340km from Addis) over one year. Of 646 cases (24% of all admissions), 285 women were interviewed. The study does not indicate how these women were selected.

2. Ashenafi M. 2004. Advocacy for legal reform for safe abortion. African J of Reprod Health. Vol. 8(1): 79-84.

- This is a descriptive article of the legal situation of women in Ethiopia. Forced marriage, also known as abduction, is a criminal offence but still widely practiced. There is immunity if the abductor willingly marries the girl.

3. Asnake M, Walie L, Melkamu Y. 2006. Improving the range of contraceptive choices in rural Ethiopia. Ethiopian J Health Development. Vol. 20(2): 74-78.

- The aim of this study is to examine the pattern of family planning method mix overtime and to assess the impact of combining strategies, such as community and facility based approaches, in improving access to family planning services and choices.
- A cross-sectional, descriptive study was conducted in September 2000 in Tehuledere woreda, in South Wollo zone, Amhara Regional State. A census was

- done on all family planning clients who live in 15 kebeles in the woreda and who used long-term and permanent family planning methods (IUD, Norplant and male and female sterilization) and they were all interviewed.
- Among the 218 family planning clients interviewed, 11 (5%) were males who had undergone vasectomy. The mean age of the sample was 34.2 years and the mean number of children ever born to the study subjects was 5.6 children. Knowledge of modern family planning methods was found to be over 90%, the majority (73.9%) of the respondents getting information on family planning from the community based reproductive health (CBRH) program.
 - Fifty two percent of the sample have undergone voluntary surgical contraception, followed by Norplant (39.0%) and IUD (8.7%). Among the major reasons mentioned for the use of the current family planning method were limiting family size (45.9%), spacing (27.5%), and side effects of the previous method (12.4%). For most clients (90.8%) the source of information for their current use is the CBRH program. [Taken from the article's summary.]

4. Berhan Y, Abdela A. 2004. Emergency obstetric performance with emphasis on operative delivery outcome: Does it reflect quality of care? Ethiop J Health Dev. Vol. 18(2): 96-106.

- This study is a one-year retrospective review (2001-2002) of clinical records of major obstetric events at Tikur Anbessa specialized hospital, the teaching hospital of Addis Ababa University.
- 5.8% of admissions were for complications of abortion. The hospital's recorded maternal mortality ratio was 1108 per 100,000 live births. The top three causes of maternal deaths were: post-abortion complications (29%), eclampsia (21%) and ruptured uterus (16%).

5. Central Statistical Agency, ORC Macro. 2005. Ethiopia demographic and health survey 2005. Macro International, Calverton MD.

- This is the most recent Demographic and Health Survey available for Ethiopia.

6. Central Statistical Agency. 2008. Summary and statistical report of the 2007 population and housing census: population size by age and sex. Central Statistical Agency, Government of Ethiopia, Addis Ababa.

- This presents detailed population sizes by district, sex, and age for the 2007 population census.

7. Erulkar AS, Muthengi E. 2007. Evaluation of Behane Hewan: a pilot program to promote education & delay marriage in rural Ethiopia. Population Council, New York.

- The Berhane Hewan Program was developed to sensitize community members to the dangers of child marriage, prevent early marriage among unmarried

adolescents and provide support for girls who are already married. The program was pilot tested in Mosebo Village, Amhara Region, from 2004 to 2006. Population-based surveys were conducted immediately before the implementation and two years afterwards, in both experimental and control areas, to measure changes associated with the Berhane Hewan program.

- Impacts were particularly apparent for younger adolescent aged 10 to 14. After controlling for marital status, age and socioeconomic status, Mosebo girls in this age group were nearly three times more likely to be in school, compared to girls in the control area. Younger Mosebo girls (10-14) were 90 percent less likely to be married compared to Enamirt (control group) girls in the same age group. On the other hand, marriage seemed to accelerate for older girls in Mosebo, after the age of 15, perhaps due to the social expectation for marriage during adolescence and its linkage with the status of the girl's father. Compared to girls in the control site, girls in the project site demonstrated improved knowledge on HIV, sexually transmitted infections, and family planning methods, and were more likely to have communicated with a close friend on these issues.
- At endline, however, Mosebo girls were nearly three times more likely to have used any family planning method compared to controls, after adjusting for demographic factors. The Berhane Hewan experiment demonstrates that significant impacts can be made on the social, educational, and health status of adolescent girls in a short period of time, through well designed and implemented support programs for girls. [Taken from the report's executive summary.]

8. ESOG. 2000. A data base on abortion literature review. ESOG (Ethiopian Society of Obstetricians and Gynecologists), Addis Ababa.

- A technical committee established by ESOG collected published articles, master's theses, unpublished reports on abortion issues. 23 articles were found and précised.

9. ESOG. 2002. Survey of unsafe abortion in selected health facilities in Ethiopia. ESOG (Ethiopian Society of Obstetricians and Gynecologists), Addis Ababa.

- This study is a facility-based one (Jun-Dec 2000) in 15 hospitals in 9 out of 11 administrative regions of Ethiopia. 1075 cases of abortion were detected in the seven-month survey, 74% spontaneous and 26% induced (self-reported). Characteristics of the cases surveyed are as follows: 58% aged 20-29; mean age was 22 years for induced and 26 years for women with spontaneous abortions; two-thirds of the women were currently married; 27% were illiterate and 28% had secondary education.
- PAC complications were distributed as follows: infection (28% of all complications), genital tract injury (12%), organ failure (13%). There were 13 abortion-deaths during the study (1.2% of all admissions).
- Costs to the health system were estimated through a Delphi method (a panel of OB/GYNs, GPs, midwives, etc.). The cost components are not made clear in the study. Complications were classified by severity (not defined): 450 mild cases

(42%), 610 moderate severity cases (57%) and 15 severe cases (1%). The average cost per case was estimated to be 309 ETB (Ethiopian birr); low severity cases cost, on average, 124 ETB; moderate cases cost 428 ETB; and high-severity cases cost 1008 ETB.

10. ESOG. 2002. Compilation and analysis of available studies in Ethiopia. ESOG (Ethiopian Society of Obstetricians and Gynecologists), Addis Ababa.

- This is the executive summary of the above-mentioned literature review on abortion. It contains 14 suggestions for further research.

11. ESOG. No date. KAP study on abortion among Ethiopian health workers. ESOG (Ethiopian Society of Obstetricians and Gynecologists), Addis Ababa.

- The available document is a summary of a longer report. The date of data collection is not given. The study was a cross-sectional survey of health workers using a self-administered questionnaire in 30 hospitals and 56 referring centers randomly selected (the sampling universe is not described). There were 2636 respondents: nurses (50%), health assistants (35%), GPs (10%) and OB/GYNS (2%).
- Some of the results of the study follow: 98% of the respondents considered unsafe abortion a significant public health problem and 60% considered it problematical in both rural and urban settings. 15% of private health workers provided abortion and 5% of public health workers did. 38% knew about and practiced PAC. 51% knew of MVA (manual vacuum aspiration). 80% of medical doctors considered MVA to be better than D&C (dilation and curettage). 78% of respondents supported moderate liberalization of abortion laws, but only 23% supported complete liberalization.

12. Federal Ministry of Health of Ethiopia. 2005. Health sector strategic plan (HSDP-III) 2005/6-2009/10. Government of Ethiopia, Addis Ababa.

- The health sector plan for 2000-2000 described in this official document mentions abortion in two places. First, in outlining its plans for service delivery and quality of care the aim is stated “to reduce the prevalence of teenage pregnancy and unsafe abortion from 20% and 50% to 5% and 10% respectively”. Secondly, the document indicates that among the key activities at health centers will be the “treatment of complications in pregnancy (pre/eclampsia, abortion, & malaria)” and “FP services including long-term contraceptives and post abortion care including MVA”.

13. Federal Ministry of Health of Ethiopia. 2008. The national RH implementation plan and cost (first draft). Government of Ethiopia, Addis Ababa.

- This draft document of the government describes, inter alia, that “gender inequality, early marriage, female genital cutting, unwanted pregnancy, closely

- spaced pregnancy, unsafe abortion, and sexually transmitted infections (STIs) including HIV/AIDS are the major reproductive health problems faced by both the young and adult section of the population”.
- The strategy document points out reproductive health related problems that are most prevalent and impacting the health and well-being of women and emphasizes six priority areas. One of these areas is the special situation of adolescents: “With a large segment of the Ethiopian population falling within the 10-29 age brackets” there is a need for “implementing programs that address such adolescent health problems like unwanted and early pregnancy and non-consensual sex that increase the risk for maternal health problems/complications including abortion, and exposure to STI and HIV infections”.

14. Gebrehiwot Y, Liabsuetrakul T. 2008. Trends of abortion complications in a transition of abortion law revisions in Ethiopia. Journal of Public Health (Oxford). Vol. 31(1): 81-87.

- This study aimed to assess the trend of hospital-based abortion complications during the transition of legalization of abortion in Ethiopia in May 2005. All medical records of women who came seeking post-abortion care in Tikur Anbessa tertiary hospital, Addis Ababa, from 1 January 2003 to 31 December 2007 were collected and reviewed. This included the period of 2 years before and 2 years after the revision of the laws on abortion in May 2005. Based on a previous documented complication rate for abortions of 30%, at least 81 medical records were needed to be reviewed per year.
- A total of 773 post-abortion cases were admitted during 2003 and 2007. The current abortion was the first abortion in three-fourths of the subjects and the second abortion in one-sixth. One of five subjects admitted that they had interfered with their pregnancy before admission, and 80% of these used mechanical techniques while the rest used drug ingestion. Comparing cases before and after “legalization”, there were significantly more married women, housewives and later gestations after legalization.
- The overall and abortion-related maternal mortality ratios showed a non-statistically significant downward trend over the 5-year period. However, the case fatality rate of abortion increased from 1.1% in 2003 to 3.6% in 2007. Late gestational age, history of interference and presenting after new abortion legislation passed have been found to be significant predictors of mortality.

15. Gebreselassie H, Fetters T, Clark K, McNaughton HL. 2002. Responding to unsafe abortion in Ethiopia: a facility-based assessment of post-abortion care services in public health sector facilities in Ethiopia. Ipas, Chapel Hill, NC.

- This is a baseline assessment, from July to September 2000, of post abortion care (PAC) conducted in three regions: Oromia, Amhara and Addis Ababa. A total of 120 health facilities were included in the study, representing 62% of all facilities (hospitals and health centers) in the three regions.

- Some of the results of the study follow: only 54% of facilities had PAC capacity; of these facilities, only a quarter had MVA equipment. Overall, 94% of evacuation procedures were D&C; only 18% of facilities had transport available for obstetric emergencies; and in those facilities that provided PAC, only 23% provided family-planning services regularly to PAC patients.

16. Getahun H, Berhane Y. 2000. Abortion among women in north Ethiopia. International J of Gynec and Obstet. Vol. 71: 265-266.

- This is a study of the magnitude of abortion in rural Gondar (one district) done in 1997. Married women (15-49) were selected in a multi-stage random sample (N=1158). Lifetime histories of abortion were collection.
- Results of the study include: 241 abortion cases (21%) were reported, yielding a rate of 1.8 abortions per woman. 91% of the abortions were reportedly spontaneous. The main reasons given for resorting to unsafe abortion were: (a) too closely spaced pregnancies and (b) poverty. Multiple marriages and a history of STDs were positively related to abortion experiences. 53% of the abortion cases had not sought treatment (thus 47% of the women had experienced post-abortion complications needing medical treatment).

17. Ipas. 2008. Tools for progressive policy change: lessons learned from Ethiopia's abortion law reform. Ipas, Chapel Hill, NC.

- This four-page fact sheet discusses how Ipas and other advocacy groups worked to successfully lobby to reform Ethiopia's abortion laws in 2005. Topics discussed include: Ethiopia's laws, constitution and parliament; arguments used by reform advocates; how opposition groups organized to prevent reform and how advocacy groups responded; critical factors for success; and tips for abortion-rights advocates looking to reform laws in other countries. [Abstract taken from Ipas website.]

18. Jeppsson A, Tesfu M, Bohmer L. 1999. Magnitude of abortion-related complications in Ethiopian health facilities: a national assessment. East Afr Med J. Vol. 76(10): 547-551.

- This is a cross-sectional descriptive study carried out in all but two regions of Ethiopia in 1996. Hospitals, health centers and health stations were sampled (95 in all, including 20 hospitals) and 214 trained and untrained traditional birth attendants were also interviewed.
- 100% of hospitals and 46% of health centers provided PAC. Health centers averaged 55 PAC cases per year and hospitals 439 cases. The percentage of PAC cases that were "major complications" (not defined) was 52% for health centers and 20% for hospitals. The most commonly mentioned complications were: septicemia (100%), hemorrhage (69%), perforation of the uterus (55%).

19. Kebede S, Jira C, Mariam D. 2000. A survey of illegal abortion in Jimma Hospital southwestern Ethiopia. Ethiopian Med J. Vol. 38: 35-42.

- This is a prospective facility-based study (1996) of women diagnosed with “illegal abortion” (N=80). Characteristics of the patients include the following: 28% were students; 88% were literate; only 39% were married; 88% knew family planning methods and 53% had previously used a contraceptive method. [This abstract is found in ESOG 2000.]

20. Kumbi S. 2008. Quality of post-abortion care in public health facilities in Ethiopia. Ethiop J Health Dev. Vol. 22(1): 26-33.

- This cross-sectional study assessed the quality of PAC in health facilities in Amhara and Oromia regional states in 2002-2003. Patient interview (103), provider interview (87) and direct observation were used in 11 facilities.
- PAC services were often delayed due to fee payment requirements and the need to purchase drugs beforehand. Provider attention was generally seen as satisfactory as judged by clients. Confidentiality was observed but process information was deficient. FP counseling was provided to only 53% of patients.

21. Kwast BE, Rochat RW, Kidane-Mariam W. 1986. Maternal mortality in Addis Ababa, Ethiopia. Studies in Family Planning. Vol. 17(6): 289-301.

- This is a major study of maternal mortality sponsored by WHO over a two-year period (1981-1983) using a two-stage stratified random sample. The survey universe was 182,836 persons in 32,215 houses. The questionnaire asked about pregnancies, births, abortions, and deaths over the prior two years. The survey took place in 1983. 9,155 live births and 45 maternal deaths were recorded. 24 deaths were “direct obstetric” and 21 were indirect. Of the 24 direct obstetric, 13 were due to abortion (54%). 12 of the 13 abortions were illegal. Of the 21 indirect obstetric deaths, several could also have been due to abortion. A maternal mortality ratio of 566 per 100,000 live births was calculated from this study.

22. Lukman HY, Ramadan AT. 2003. Critical appraisal of the law enforcement in abortion care in Ethiopia. East Afr Med J. Vol. 80(11): 581-584.

- This study is an analysis of two-year’s worth of police case files (216 cases, 326 subjects) on people charged under the existing law on abortion. The accused were found to be poorly educated, low-income, and moderately young.

23. Mekbib T, Kassaye E, Getachew A, Tadesse T, Debebe A. 2003. The FIGO Save the Mothers Initiative: the Ethiopia-Sweden collaboration. International J of Gynec and Obstet. Vol. 81: 93-102.

- The FIGO-Sweden demonstration project began in 1999 in West Showa Zone (in one hospital and two health centers) and its results were measured in 2001. Inputs

- included extensive training in emergency obstetric care as well as supply of drugs, materials and equipment. Constant evaluation of facility outputs were recorded during the project.
- Results showed dramatic improvements: the C-section rate at the hospital jumped from 3.7% in 1998 to 17.3% in 2001; the case fatality rate dropped from 7.2% to 4.6%.

24. Melkamu Y, Enquesselassie F, Ali A, Gebresalassie H, Yusuf L. 2003. Fertility awareness and post-abortion pregnancy intention in Addis Ababa, Ethiopia. *Ethiopian J Health Dev.* Vol. 17(3): 167-174.

- This is a cross-sectional study conducted in four Addis Ababa hospitals selecting cases of “certainly induced abortions” in 2001-2002. The number of women interviewed was 401. Cases with severe illness were excluded from the study. 70% of the interviewed women were aged 15-29, 71% were married, and 65% had primary or secondary education. 47% had never used contraceptives. Only 69 cases (17%) were identified as induced abortions, the remaining being spontaneous.

25. Meskel Y, Chekol A. 1999. Induced abortion and prevalence of sexually transmitted diseases and contraceptive behavior in abortion cases. *Ethiopian J Health Sci.* Vol. 9(2): 77-83.

- This is a prospective study (1997-1998) of patients admitted to the gynecological ward in Gambella hospital, SW Ethiopia. 70% of all admissions were PAC patients (36% induced, 64% spontaneous). Women with induced abortion were young, single, and 46% had secondary-level education. [This abstract is found in ESOG 2000.]

26. Negash S. 2002. Cost analysis of abortion in Addis Ababa public hospitals. Addis Ababa University, Faculty of Medicine, Addis Ababa.

- The study was conducted in four hospitals in Addis Ababa during three months (2001-2002). The data on cost of unsafe abortion was collected through exit interview, patient record review, observation and administrative record review. A total of 424 patients attended the four hospitals for the management of abortion complications during the data collection period.
- The per-patient costs of PAC services were: 82 ETB (Ethiopian birr) for drugs and supplies, 9.1 ETB for laboratory work, 13.8 ETB for labor, and 26.8 ETB for overhead. The total cost per case was 131.7 birr. The average length of stay in hospitals was 33 hours. Out-of-pocket expenses per patient was 535.5 ETB (of which 451.5 ETB was in opportunity cost).
- The cost of “safe abortion” was estimated at 65.3 ETB using D&C and 41.0 ETB using MVA

27. Otsea K, Tesfaye S. 2007. Monitoring safe abortion care service provision in Tigray, Ethiopia: report of a baseline assessment in public-sector facilities. Ipas, Chapel Hill, NC.

- This study of health facilities in the Tigray Region was conducted after the change of abortion law in 2004. This study was a baseline assessment of health facilities' capacity to provide PAC services in Tigray region (surveyed all 12 hospitals and 18 or 38 health centers).
- Some of the results of the study follow: 7% of "abortion cases" (i.e. admissions for either PAC or for safe abortion procedures) are terminations of pregnancy. PAC services were actually available only in 39% of health facilities; 59% of all obstetric cases were abortion-related (induced and spontaneous); 6% of PAC cases were "serious"; only 29% of evacuations used a recommended procedure (MVA or medical abortion); and only 31% of PAC cases got family-planning services before leaving the facility.

28. Senbeto E, Alene GD, Abesno N, Yeneneh H. 2005. Prevalence and associated risk factors on induced abortion in northwest Ethiopia. Ethiop J Health Dev. Vol. 19(1): 37-44.

- This community-based survey interviewed a sample of 1,346 women aged 15-49 in the Amhara Region in 2003. 19% of women reported that they had experienced an abortion; 75% were spontaneous and 25% were induced (according to WHO definitions.) Of the women who experienced induced abortions, 74% lived in urban areas and the majority were young (aged 20-24).
- The main reasons for induced abortions were: fear of family/community sanctions (31% of respondents); avoiding school interruption (27%); and financial problems (14%).
- 48% of the surveyed women who had had an induced abortion reported that they had self-abortions; 14% had gone to nurses or health assistants, and 13% had gone to traditional healers. 55% of women who had an induced abortion had visited a health facility for PAC.

29. Tadesse E, et al. 2001. Illegal abortions in Addis Ababa, Ethiopia. East Afr Med J. Vol. 78(1): 25-29.

- This study interviewed abortion cases at five Addis hospitals in 1990-1991 (N=2275). 43% of the abortion cases were spontaneous and 57% induced (N=1290). During data collection there were 7,158 deliveries, the ratio of induced abortions to live births being 1 to 5.5.
- The providers of the abortions were: 35% health assistants, 28% self-induced, 9% medical doctors. Materials used for induction of the abortion included plastic catheters (14% of surveyed women), plastic tubes (32%), ampicillin (32%), metallic rods (22%), and roots/herbs (5%).

30. Taffa N, Sundby J, Bjune G. 2003. Reproductive health perceptions, beliefs and sexual risk-taking among youth in Addis Ababa, Ethiopia. Patient Educ and Counseling. Vol. 49: 165-169.

- This study, carried out in Addis Ababa in 2000, investigated perceptions and sexual behavior of youth aged 15-24. The main findings were (1) that knowledge of risks from unsafe abortions and attitudes towards abortion did not vary much between high-risk and low-risk groups; and (2) that beliefs were inconsistent with perceptions.

31. Tesfaye S, Fetters T, Clark K, McNaughton HL. 2006. Expanding our reach: an evaluation of the availability and quality of post-abortion care services in three regions of Ethiopia between 2000 and 2004. Ipas, Chapel Hill, NC.

- This was a pre-post-intervention comparative assessment, from April-June 2004, of post abortion care (PAC) conducted in three regions: Oromia, Amhara and Addis Ababa. (See Gebresalassie et al., 2002, for the pre-test report.) An intensive package of PAC services was introduced in 42 of 119 facilities.
- Results of the study follow: In intervention facilities, capacity for PAC rose from 57% to 79%; FP services as part of PAC rose from 25% to 73%; MVA use in uterine evacuations rose from 14% to 50%. Progress was also made in the comparison facilities, but it was not nearly as dramatic. More community awareness, greater attention to PAC in facilities, and more MOH motivation were also noted in the intervention facilities.

32. Wakbulcho M, Moller B. 1994. Attitudes toward pregnancy among women attending an antenatal clinic in Ethiopia. International J of Gynec and Obstet. Vol. 46: 61-61.

- This is a letter to the editor of a journal which reports on maternal attitudes to current pregnancy. The main reason given in Addis Ababa for unwanted pregnancies was that contraceptives were either inaccessible or had failed. In Wolliso (a rural setting) only 30% gave that reason, but 56% were ignorant about family planning.

33. Wilder J. 2007. Women's empowerment in Ethiopia: new solutions to ancient problems. Pathfinder International/Ethiopia, Addis Ababa.

- This is a general tome on women's empowerment. Nonetheless, it contains nothing on the abortion issue.

34. World Bank. 2007. Capturing the demographic bonus in Ethiopia: gender, development, and demographic actions. World Bank, Washington DC.

- This is a large-scale analytical study of population and development in Ethiopia covering most reproductive health areas.

35. Yusuf L, Zein ZA. 2001. Abortion at Gondar College Hospital, Ethiopia. East Afr Med J. Vol. 78(5): 265-268.

- This is a study of gynecological ward and operation theatre records from 1988 to 1993 in a teaching hospital in Gondar district (N=1191), 1020 (86%) of abortions were spontaneous and 171 (14%) induced. Whereas 89% of spontaneous abortions were non-septic, 40% of the induced abortions were septic. The pattern of post-abortion complications recorded in the study was as follows (N=276): anemia 45%, shock 16%, genital tract infection 21%, injury 9%, incomplete evacuation 2%, peritonitis 6%, renal failure 0.7%.