

ORIGINAL RESEARCH ARTICLE

Health Providers' Perception towards Safe Abortion Service at Selected Health Facilities in Addis Ababa

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Abstract

In Ethiopia, unsafe abortion accounts up to 32% of maternal deaths. The perception of health providers towards safe abortion provision at selected health facilities in Addis Ababa, Ethiopia was assessed. A stratified random sampling was used to select 431 health providers. A cross-sectional study was conducted from March 25-April 15, 2008 using a structured self-administered questionnaire. The results were interpreted using descriptive statistics and odds ratios. A majority of the health providers (96.4%) recognized that unsafe abortion was a serious health problem. Providers who had safe abortion practice were 2.57(95% CI 1.49-4.44) times more likely to have favorable attitude towards safe abortion than those without practice. Similarly, providers who knew the law governing abortion were 1.77 (95% CI 1.12-2.78) times more likely to have this favorable attitude than those who lack this knowledge. In conclusion, training of health providers on safe abortion and reproductive rights are essential to reduce maternal mortality (*Afr J Reprod Health 2011; 15[1]: 31-36*).

Résumé

Perception des dispensateurs de soins médicaux envers les services de l'avortement sans danger au sein des établissements de santé sélectionnés, à Addis Abéba. En Ethiopie, l'avortement dangereux est responsable de jusqu'à 32% de décès maternels. La perception des dispensateurs de soins médicaux envers l'assurance de l'avortement sans danger aux établissements choisis, à Addis Abéba, Ethiopie a été évaluée. On s'est servi d'un échantillon randomisé et stratifié pour sélectionner 431 dispensateurs. Une étude transversale a été menée du 25 mars au 15 avril 2008 à l'aide d'un questionnaire structuré et auto-administré. Les résultats ont été interprétés à l'aide des données statistiques et des proportions fractionnées. Une majorité des dispensateurs de soins médicaux (96,4%) ont reconnu que l'avortement dangereux est un problème de santé important. Les dispensateurs qui avaient des pratiques d'avortement sans danger avaient 2,57(95%CI 1, 49-4,44) fois plus la possibilité d'avoir une attitude favorable envers l'avortement sans danger que ceux qui n'ont pas de pratiques. De la même manière, les dispensateurs qui connaissaient la loi qui régit l'avortement avaient 1,77(95% CI 1,12-2,78) fois la possibilité d'avoir cette attitude favorable que ceux qui ne connaissent pas cette loi. En conclusion, il est nécessaire de former les dispensateurs en matière de l'avortement sans danger et sur les droits de la reproduction pour réduire la mortalité maternelle (*Afr J Reprod Health 2011; 15[1]: 31-36*).

Keywords: Addis Ababa; Perception of abortion; Safe abortion

Introduction

Unsafe abortion is defined as pregnancy termination by unskilled persons and/or those conducted under unhygienic condition¹. Death due to unsafe abortion accounts a significant proportion (13%) of global maternal mortality. Each year an estimated 36 million to 53 million abortions are performed worldwide. Of this figure, around 20 million are considered unsafe¹. In developing countries complications of unsafe abortion causes between 50,000 and 100,000 women's deaths annually. World Health Organization (WHO) estimates show that the proportion of maternal mortality due to abortion complications ranges from 8% in Western Asia to 26% in South America, with a worldwide average of 13%^{1, 2, 3}.

Studies identify a wide range of factors impacting the perception of health professionals towards abortion.

Some argue that health professionals who oppose abortion wish to restrict the autonomy that women gain with the legal right to abortion, while others claim to have religion, tradition and law on their side. However, if abortion is important in determining women's reproductive health, it is necessary to talk about the ethics of abortion from a women-centered perspective^{4, 5, 6, 7}.

Empirical evidence associates that health professionals who do not support safe abortion often lack sufficient knowledge of current legislative of their respective countries. In addition to this knowledge factor, provider's service year, experience on safe abortion, sex, and type of institution(private versus government) are among the factors often mentioned as determinants of provider's perception towards safe abortion^{4, 5, 6}.

Many providers are not aware of the fact that termination of pregnancy is permitted under certain conditions leading to ranges of inappropriate attitudinal frameworks or mindset implying a major barrier to give

the service. Stigma and passive resistance remain insidious barriers to the full realization of reproductive equality⁸.

The International Planned Parenthood Federation (IPPF) framework on client's right and provider's needs emphasizes that, both the perspective of client and providers are important in determining the quality of services. Services that are restricted or stigmatized clients due to provider's perception impact the quality of service. In the more extreme cases, the provider might be reluctant to offer any abortion service and/or will undermine the legal parameters, ultimately compromising the woman's right for information and services^{5,9}.

Ethiopia has ratified all international laws and conventions pertaining to abortion. However, until recently safe abortion services were not available. The 1957 Penal Code allowed abortion only to save the life or health of the woman¹⁰. This restrictive Law coupled with contraceptive shortages, low usage of available methods, and high rate of sexual violence had led the country to be among the leading developing countries in abortion related mortality¹¹.

In 2005, in response to a need for intervention, the old criminal code was replaced by proclamation NoO 414/2004 (Article 551). The new abortion Law clearly specifies cases where terminating pregnancy is allowed by law; "... *Termination of pregnancy by recognized medical institution within the period permitted by the profession is not punishable where pregnancy is the result of rape or incest; or if the continuance of the pregnancy endangers the life of the mother or the child ..., or if the child has an incurable and serious deformity, or if the pregnant woman...unfit to bring up the child...*"^{12,13}

Nevertheless, the new abortion law has yet to yield the change in maternal health outcomes that the country had hoped for. Empirical evidence from supervisory interactions and intuition tell us that this could be partly due to the perception of health providers^{5-7, 9, 12, 14}. Cognizant of this, the present study seeks to answer the following key research questions; "what does perceptions on safe abortion look like among health care service providers?", "what are the factors which affect the perception of health providers towards safe abortion?"

Methods

Addis Ababa- the capital city of Ethiopia, has a population of 2,738,248, of whom 1,433,730 (52.4%) are females¹⁵. The city has 12 government hospitals, 29 health centers, 25 private hospitals and 122 private higher clinics.

A cross-sectional study was conducted from March 25- April 15, 2008 using a structured, self-administered questionnaire. Both open and closed ended questions were used. A stratified sampling method was used. Four strata were taken; including private hospitals (12/25), private higher clinics (12/122), government hospitals (6/12) and government health centers (3/29). A total of

33 health facilities with 431 eligible, actively employed health providers were surveyed. All health workers are required to enter regular rotation and be proficient in all services, including safe abortion care.

Ethical clearance was obtained from the Faculty of Medicine of Addis Ababa University and Addis Ababa Health Bureau. Written permission of the health facilities was secured for their employees to participate in the study and; each health provider within the selected health institution gave a written consent to participate in the study. To ensure data quality, pre-test was done on similar professional groups with different health facility location. In addition, one trained midwife and the principal investigator (Jemilla A. Retta) supervised data collection processes and assured collection procedures through oversight and data checking. Data were entered as confidential, anonymous, aggregate analysis and reporting system was put in place.

Epi info 2000 and SPSS version 15 were used for data entry, cleaning and analysis. To better characterize providers' perceptions, we conducted descriptive, bi-variate and multi-variate analyses. A series of staged binary logistic regression models were fitted to identify factors affecting health providers' perception towards the safe abortion service practice in Addis Ababa. The dependent variable of the study was health workers' perception towards safe abortion care service as stipulated in the current law. Logistic regression model were adjusted for socio-demographic variables and those representing awareness and knowledge about the most current abortion law, previous experience and reasoning. The logistic regression was performed in two steps. First, each explanatory variable was separately regressed against the dependent variable, mean attitude score. Subsequently, those explanatory variables whose p-values greater than 0.05 were excluded. In the second step, the remaining independent variables were regressed to see their association with the mean attitude score.

The dependent variable, mean attitude score, is the average of the values assigned to attitudinal variables. Attitudinal variables considered in the study include, but are not limited to, provider's opinion on woman's right to terminate pregnancy, considering termination as a sinful act or not, provider's position on full legalization of abortion, whether or not abortion complication is a serious health problem, and willingness to work in a site where termination is performed. Provider's opinion about each attitudinal variable was coded 1 if in favor and 0 otherwise. Finally, the average value of these scores was computed for each respondent and the mean attitude scores were obtained.

Results

Of 431 targeted sample questionnaires distributed, 419 were completed and returned, giving a response rate of 97.2 %. Summary statistics of respondents are presented in Table 1. Of the 419 participating health practitioners, the majority (54.4%) were nurses, a quarter (24.6%) were

midwives, and the remainder were physicians (16.7%), and health officers (4.3%). More than half (55.8%) of the respondents were female and the median age was 29.3 years. Two-thirds (68.8%) were self reported Ethiopian Christian Orthodox and 20.5% were Christian Protestants. Nearly half of the respondents were married. The majority (90.0%) of the respondents had more than one year of clinical experience, and a quarter (24.3%) reported experience of 10 years or more.

Table 1: Selected socio demographic characteristics of respondent health providers, Addis Ababa, April 2008

Characteristics	Number (%)
Sex	
Male	185 (44.2)
Female	234 (55.8)
Age	
20-25	96 (22.9)
26-30	148 (35.3)
31-35	77 (18.4)
36-40	47 (11.2)
41-45	39 (9.3)
46-50	12 (2.9)
	Median age=29.3
Marital Status	
Never Married	190 (45.3)
Married	223 (52.9)
Divorced	4 (1.0)
Windowed	2 (0.5)
Religion	
Orthodox	286 (68.3)
Protestant	86 (20.5)
Muslim	32 (7.6)
Other	15 (3.6)
Type of provider	
Nurse	228 (54.4)
Midwife	103 (24.6)
Physician(General Practitioner)	45 (10.9)
Health officer	18 (4.3)
Physician(Ob-gyn)	13 (3.1)
Physician(other specialist)	12 (2.9)
Years of experience	
Less than one year	39 (9.3)
1-2 years	93 (22.2)
3- 5 years	92 (22.0)
6- 10 years	93 (22.2)
More than 10 years	102 (24.3)
Primary work place	
Government hospital	201 (48.0)
Government health center	134 (32.0)
Private hospital	65 (15.5)
Private higher clinic	19 (4.5)

Three-quarters (74.7%) of the respondents claimed they knew the definition of safe abortion although none were able to comprehensively define the term. More than three-quarters of the respondents were familiar with surgical methods of termination such as, Dilation and Curettage(D&C) (78.5%), Evacuation and Curettage (E&C) (74%), and Manual Vacuum Aspiration (MVA) (84.7%), while less than half were familiar with medical

procedures such as Oxytocin (48%), prostaglandin's (35.6%), and misoprostol (21.2%). Surprisingly, 6.0% of the respondents were not familiar with a single one of these procedures.

When asked if they had formal training on procedures to terminate pregnancy, only 29.4% responded in the affirmative. Of those who had previous training, the majority (85.4%) had training on MVA procedure, while 24.4% had training in administering misoprostol. Forty five percent of those who with formal training in one of these procedures reported performing pregnancy termination at least once within the last six months and 30% within the past two years, at the time of interview. For practitioners who never performed pregnancy termination, "personal reason" (33%), lack of permission from employer (23%), service unavailability in the facility (13.6%) were cited as the main reasons.

Health providers were asked about their views on major complications caused by unsafe abortion. The majority (95.9%) of health providers identified severe bleeding and infection (90.7%) as the main forms of complication. Health providers were asked to identify the best to response complications due to unsafe abortion (more than one response was permitted). Accordingly, the majority identified taking vital sign (87.2%), securing intravenous (IV) line (90.2%), and consulting senior (80.0%) as the optimal emergency responses.

On the possible solutions to halt the incidence of unsafe abortion, the majority (87.4%) of respondents suggested greater use of modern contraceptive and three quarters (76.8%) supported giving health education on pregnancy complications. Fewer respondents suggested safe abortion services (31.1%) and its legalization (10.4%) as a solution. (Table2).

Table 2: Respondent health providers' views on complications and solutions to prevent unsafe abortion, Addis Ababa, April 2008

Characteristics	Frequency (%)
Problem due to unsafe abortion*	
Bleeding	402 (95.9)
Infection	380 (90.7)
Uterine perforation	323 (77.1)
Death	309 (73.7)
Infertility	306 (73.0)
Pelvic pain	281 (67.0)
Psychological trauma	273 (65.2)
Other	11 (2.6)
I don't know	2 (0.2)
Suggestion as a solution*	
Use of modern contraceptives	366 (87.4)
Health education	322 (76.8)
Avoiding sex if unmarried	184 (43.9)
Use of safe abortion service	131 (31.3)
Use of traditional/natural method	92 (22.0)
Give birth once pregnant	90 (21.5)
Abortion legalization	44 (10.5)
Other	6 (1.4)

*The totals do not add to 100 because of multiple responses

Respondents were asked to state reasons they thought women seek abortion. Responses (Figure 1) included economic constraint (83.3%) and unwanted pregnancy (68.7%). Twelve percent of the providers suggested that women use abortion as contraceptive.

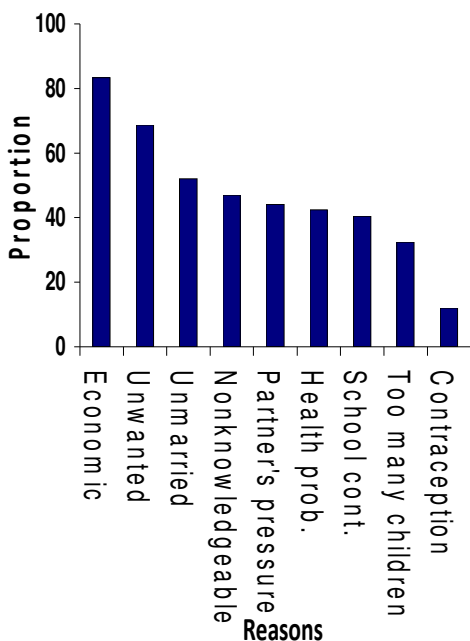


Figure 1: Respondent health providers perception on response of women seeking abortion care services in Addis Ababa April 2008

When the health providers were asked whether or not they would be comfortable working at a site where termination of pregnancy is done, more than a quarter (27.0%) reported they would be comfortable. The 306 respondents who reported that they would be uncomfortable working in a site where safe termination of pregnancy is performed were asked about their reasons. A majority of them (66.6%) cited religious grounds, followed by personal value (39.8%) and lack of training (19.0%) (more than one answer was permitted) (Figure 2).

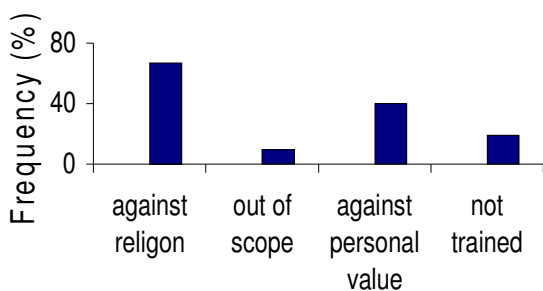


Figure 2: Reasons of health providers for not being comfortable working at a site where termination of pregnancy is done, Addis Abeba, April 2008

Respondents were asked for their agreement on whether or not the woman herself should decide to have a legal abortion. Of the total, (29.4%) agreed, (55.1%) disagreed while (15.5%) remained neutral. Respondents were also asked what additional evidence is needed to terminate a pregnancy. Nearly two-third (67.4%) of the respondents believed that the woman's word should be enough to initiate safe abortion, while (17.8%), (13.4%) said that at least three witnesses, and police evidence, respectively, should be required.

Lastly, the present study has employed binary logistic regression to understand the relationship between various variables of interest. The result from the fitted regression shows that those who already performed safe abortion service were 2.57 (95% CI 1.49-4.44) times more likely to have a favorable attitude than those who hadn't practice safe abortion service. Those who were aware of the prevailing law are 1.77 (95% CI 1.12-2.78) times more likely to have a favorable attitude than those who were not aware of the law. All socio-demographic variables entered into the regression were not statistically significant explaining mean attitude score (Table 3).

Discussion

Unplanned and unwanted pregnancies and unsafe abortions are serious public health problems in the developing world, including Ethiopia⁸. Legalization of safe abortion care service is a human rights imperative^{9,12,13,16}. Even in countries where abortion is allowed by law safe public sector services are often not available for eligible women for reasons like providers bias, lack of medical equipment or lack of trained personnel, and bureaucratic problems¹⁷. The practical reality in Ethiopia falls under this latter category. In addition to the law which allows safe abortion, the importance of the perception of health providers in reducing abortion related maternal mortality were looked into consideration. Providers' attitudes would have potential consequences for women's already with scarce access to safe abortion services⁶.

Although three-quarter of the respondents said they knew what safe abortion means, the finding from the follow up questions revealed that the knowledge of the providers were widely varying and in a number of cases inconsistent with the standard definition which describes safe abortion as "the termination of pregnancy by qualified and skilled persons using correct techniques in sanitary conditions"^{9,13,16}.

The other important finding that emerges from the study is that, although the vast majority of the respondents claimed that they knew the procedures for termination of pregnancy only few knew about medical abortion practice such as misoprostol, prostaglandins and oxytocin. This could be due to the fact that, in Ethiopia so far, only few had access to up to date trainings pertaining to pregnancy termination. This claim can be evidenced by the result that, among the sampled health providers, only

Table 3: Factoring of selected characteristics by mean attitude of health providers towards the practice of safe abortion service, Addis Ababa, April 2008

Characteristics	Mean attitude score		Crude OR CI	Adjusted OR CI
	<10.6	>10.6		
Sex				
Male	87 (47.0)	98 (53.0)		
Female	115 (49.1)	119 (50.9)	0.919 (0.624-1.351)	0.913 (0.615-1.353)
Age				
Greater than 30	80 (45.7)	95 (45.3)		
Less than 30	122 (50.0)	122 (50.0)	0.842 (0.571-1.243)	0.743 (0.440-1.253)
Religion				
Muslim	11 (34.4)	21 (65.6)		
Christian	191 (49.4)	158 (40.8)	1.860 (0.873-3.963)	1.863 (0.857-4.048)
Marital Status				
Currently married	104 (47.1)	117 (52.9)		
Currently not married	98 (49.5)	100 (50.5)	0.907 (0.618-1.332)	0.940 (0.582-1.518)
Profession				
Nurse/midwife	160 (48.3)	171 (51.7)		
Physician/Ho	42 (47.7)	46 (52.3)	1.025 (0.640-1.641)	0.990 (0.608-1.612)
Professional Experience				
Greater than 5	98 (50.3)	97 (49.7)		
Less than 5	104 (46.4)	120 (53.6)	1.166 (0.794-1.712)	1.409 (0.887-2.240)
Facility's Ownership				
Government	140 (48.6)	148 (52.7)		
Private	62 (47.3)	69 (52.7)	1.053 (0.696-1.592)	0.909 (0.582-1.418)
Ever trained on abortion procedure				
No	158 (53.4)	138 (46.6)		
Yes	44 (35.8)	79 (64.2)	2.056 (1.332-3.172)	1.023 (0.592-1.768)
Ever performed abortion procedure				
No	165 (55.9)	130 (44.1)		
Yes	37 (29.8)	87 (70.2)	2.984 (1.907-4.672)	2.571 (1.490-4.436)
Familiar with current Law				
No	83 (61.9)	51 (38.1)		
Yes	119 (41.8)	166 (58.1)	2.984 (1.907-4.672)	1.765 (1.119-2.783)
Knows unpunishable safe abortion practice conditions				
No	50 (61.0)	32 (39.0)		
Yes	152 (45.1)	185 (54.9)	1.902 (1.162-3.113)	1.401 (0.824-2.383)

29.4% reported that they had training on safe pregnancy termination.

The finding that only a quarter of respondents were willing to participate in pregnancy termination is striking and shows the challenge posed by lack of awareness among professionals. The majority of providers preferred the provision of MVA followed by E&C. It seems that providers' willingness to participate in pregnancy termination is largely influenced by their previous training experience.

The women's ability to independently decide on reproductive health matter is essential in the fulfillment of women's human rights with a direct implication on the achievement of the Millennium Development Goal (MDG) 3 on gender equality and MDG 5 on maternal health¹⁸. From a human rights perspective, compelling a woman to serve others by bearing unwanted child is a clear denial of her human dignity and autonomy and an abuse of her reproductive rights and capacities. Application of human right to sexual and reproductive health emphasized the right to be free from all forms of discrimination including "Discrimination with regard to

access to sexual and reproductive health service and right to information and education". Moreover it "...discourages programs which do not give full information on the relative benefits, risks and effectiveness of all methods of fertility regulation"¹⁶. With this general understanding, respondents were asked whether or not a woman should decide to have legal abortion. Contrary to our hypothesis, the majority of respondents (n= 231, 55.1%) did not support the idea that a woman herself should decide whether or not to have a legal abortion.

Even though, almost all health providers agreed that abortion is a very serious health problem and nearly half of them acknowledge that abortion should be legal and accessible to all women, only 37% were willing to give abortion service and 29% participated in termination of pregnancy. In such a situation trainings intended towards improving the attitude of health providers are fundamental.

A research conducted by Ethiopia society of Obstetrics and Gynecology (ESOG) prior to liberalization suggests that 'the secrecy surrounding abortion forces

women to use any available method of abortion irrespective of its safety' ¹⁴. The study further noted that complications of unsafe abortions are compounded by the legal restrictions that prevailed at that time. However, it shows that even after liberalization women's access to safe abortion is limited partly due to provider's unfavorable attitude towards abortion.

The regression results show that those who had previously performed abortion were more likely (OR 2.98 95% CI, 1.91-4.67) to be pro-abortion than those who not. As expected, those who had claimed to be familiar with the law were more likely (OR 2.27 95% CI, 1.49-3.46) to favor safe abortion compared to those with limited knowledge about the law governing abortion. These results have far reaching policy implications. Complementing the safe abortion law with continuous awareness creation trainings among health providers can bring about concrete improvements in reducing maternal mortality due to unsafe abortion.

Conclusion

Although the great majority believed that unsafe abortion was a serious health problem only a quarter of respondent health providers were actually willing to participate in pregnancy termination. In addition, the logistic regressions results revealed that socio-demographic variables did not explain providers' attitude toward safe abortion, while actual clinical practice and knowledge about the law governing abortion were significant factors associated with the mean attitude score.

Therefore, training of health providers about different type of procedures and reproductive right as well as about their sense of ethical obligation to provide safe termination of pregnancy is very crucial.

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References

1. Care for post abortion complications: women's lives at risk, 1997; Population Reports (The Johns Hopkins School of

- Public Health) 25 (1). Available electronically: <http://info.k4health.org/pr/110/110chap1.shtm1#top>
2. Mesce, D and Sines E. Unsafe Abortion Facts and Figures. Population Reference Bureau, 2006. Available electronically: <http://www.prb.org/pdf06/UnsafeAbortion2006.pdf>
3. WHO, unsafe abortion: Global and regional estimates of incidence of unsafe abortion and associated mortality 2000. 4thed, Geneva, 2004.
4. Henry P. David, Abortion in Europe, 1920-91: A Public Health Perspective Studies in Family Planning, 1992; 23 (1):1-22.
5. Dabash R, Pena M, Kolaycz R, Carino G, Mejia M, Winikoff B, Ward V.: How provider attitudes towards abortion can impact the quality of and access to abortion services: An assessment of IPPF/WHO provider Knowledge, Attitude and practice in six Latin America and Caribbean countries, 2004.
6. Solmaz Shotorbani, Fredericks Zimmerman, Janice F. Bell, Deborah Ward and Nassim Assefi: Attitudes and Intentions of future health providers towards Abortion provision: Perspectives on Sexual and Reproductive Health, 2004; 36(2):58-63.
7. Gebreselassie H., Fetters T., Singh S. Abdella A, Gebrihiwot Y, Tesfaye S Geressu T, Kumbi S. Caring for Women with abortion complications in Ethiopia: national estimates and future implications. Int. Perspect Sex Reprod Health. 2010; 36(1):6-15.
8. Mitchell EM, Trueman KA, Gabriel MC, Fine A, Manentsa N.: Accelerating the Pace of Progress in South Africa: An Evaluation of the Impact of Values Clarification workshops on Termination of Pregnancy Access in Limpopo Province Chapel Hill, NC: 2005 Ipas.
9. Ipas, Abortion and human right in Sub-Saharan Africa, Initiatives in Reproductive Health Policy, 2000: 3 (2), Ipas
10. Penal Code of the Empire of Ethiopia, Proclamation Number 158 of 1957 (Negarit Gazeta Extraordinary issue number 1 of 1957). The Ethiopia Empire Government, 1957: 277.
11. Ipas, <http://www.ipas.org/countries/Ethiopia.aspx> (June 2008).
12. Ethiopia, Proclamation Number 414/2004, Criminal Code of the Federal Democratic Republic of Ethiopia, Article 551 (2004).
13. Federal Democratic Republic of Ethiopia – Ministry of Health. Technical and Procedural Guidelines for Safe Abortion Service in Ethiopia, 2006 Addis Ababa.
14. Ethiopian Society of Obstetrics and Gynecology, KAP study on abortion among Ethiopian health workers: 2002 (unpublished).
15. Central Statistical Authority. Population and Housing Census of Ethiopia. Central Statistical Authority, Addis Ababa, Ethiopia, 2007.
16. UNFPA, Programm of Action, Adopted at the International Conference on Population and Development: Cairo, 1994.
17. Bongartes, John: Trends in unwanted childbearing in the developing world: Studies in Family Planning, 1997: 28(4): 267-272.
18. World Bank, the Millennium Development Goals for Health: Rising to the Challenge, Washington D.C, 2004.