# At what cost? The medical and non-medical costs of terminating a pregnancy in Cambodia

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## Key messages:

- Women who choose to have an abortion often pay more than a fee for the service. Fees and other medical costs of an abortion may include the cost of the termination, multiple visits, pregnancy tests, care for symptoms following the procedure and medicine for pain management. Additional non-medical costs such as transportation, food and childcare may also add to the total costs incurred. Finally, lost productivity while seeking an abortion and post-procedure care or visits may require more resources.
- 2. This study describes actual costs incurred by a cohort of women receiving abortion care and presenting at dissimilar private and public sector abortion providers from the time of service up to two weeks following the abortion.
- 3. The median total cost incurred by women was US\$41 in a country with an average per capita income of US\$339.

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#### Abstract

This descriptive cohort study examines the direct medical costs such as consultation fees, tests and medicines and non-medical costs such as transportation, food and childcare as well as the lost wages incurred by a sample of 88 women presenting for an induced abortion procedure at ten public and private sector abortion providers in Cambodia. Cost data was collected from participants at two times: immediately prior to discharge from the abortion procedure (the exit interview) and again, 10-14 days later (the follow-up interview). The exit interview collected data on medical, non-medical costs and lost wages of all household members incurred prior to the exit interview and the follow-up interview collected data on the medical, non-medical and lost wages of the household members incurred during the 14 days subsequent to the abortion. Descriptive analysis was used to examine costs against a number of explanatory variables such as the woman's employment status, gestational age of pregnancy, type of provider first sought for the index abortion, type of uterine evacuation procedure and number of health visits. Results indicate that higher costs were associated with employed women, greater gestational age, the selection of a pharmacist or non-governmental organization (NGO) clinic for the first visit, the use of the Covac uterine evacuation procedure and if multiple visits were required for the successful termination of the index pregnancy. The study underscores the need for more affordable abortion services in order to ensure these services are available for all women. Even in the Cambodian context, where abortion is unrestricted during the first trimester of pregnancy, the study findings indicate that the process of obtaining high quality abortion care was costly to women and their household members.

#### Introduction

With the passage of the 1997 legal reform on abortion Cambodia became one of the most progressive countries in Asia with regard to abortion restrictions (Royal Kingdom of Cambodia 1997). Termination of pregnancy upon request is permitted up to 12 weeks of gestation and beyond 12 weeks for any fetal abnormality, risk to the woman's life or rape (Long and Ren 2001). However, in 2008, safe and affordable abortion services in the public health system are not universally available. Provider biases, delays in the guidance for implementation of the law and inadequate provider training programs have all hindered equitable and affordable access to induced abortion while maintaining the status quo of private sector provision (Hill and Heng 2004). High costs for private sector abortions and the veil of secrecy that prevents women from obtaining accurate information about abortion services continues to push women toward untrained and unauthorized abortion care provided by unregistered practitioners. It is estimated that abortion-related morbidity among women cared for by these providers can be as frequent as 1 in 4 cases requiring further postabortion care (Hill and Heng 2004). In this decade many women seeking an abortion, and even some health care providers, still consider abortion services to be illegal, the resulting high prices combined with a lack of reliable information have created a thriving economy for quasi-legal and unsafe abortion services (Lester 2002; Huff-Rouselle 2001). It is women who pay the price for these unclear abortion policies; for either a lack of reliable information or safe options, many women continue to spend considerable time and money seeking and obtaining an abortion from untrained providers who seem either affordable or confidential (Hill and Heng 2004).

In an environment where safe abortion services are not widely available, the costs of abortion can be high. While health facility fees and facility-level costs of abortion have been explored in several countries (Vlassoff 2006; Bankole 2006; Billings and Benson 2005), the total costs incurred by the woman and her household in seeking, procuring and recovering from an abortion are largely unknown. Research conducted in 2003 has shown that clinic fees for a first-trimester abortion in the private sector in Cambodia can range from \$4 to more than \$100

(Lester 2002). However, women and their households may incur costs in addition to the direct medical costs of the procedure, tests and medicine. Costs of multiple visits, care and information-seeking as well as transportation, food and childcare can be substantial. Additionally, the indirect cost of lost labor or productivity to the woman or an accompanying family member while seeking or receiving care or the inability to perform routine tasks in the process of obtaining an abortion can be important for a household subsisting on marginal income (Potdar et al. 2007). In low income countries such as Cambodia, a tenuous relationship exists between productivity and livelihood and any costs related to health care may trap people in poverty (WHO 1999). In this study we examine and describe the resources required to terminate a woman's pregnancy.

#### **Data and Methods**

This analysis describes information based on a subset of 88 women seeking induced abortions from a larger descriptive cohort study of 160 women presenting for abortion-related care at one of ten public or private health facilities in Cambodia. Ten recruitment facilities, including three public hospitals, two public health centers, and five private practices, were purposively selected to represent a range of abortion providers, locations, and service quality. Among these, one hospital and one health center were rural sites, the remaining sites were urban. The private practices included two clinics run by non-governmental organizations (NGOs), one clinic run by an obstetrician/gynecologist (ob-gyn) and two midwives' clinics. Eligible patients at each facility were selected consecutively during the four-week study period, with a maximum of 20 women recruited from each facility. The study population was not restricted on the basis of the woman's age, gestation of pregnancy, or any other factors. Ethical approval was obtained from participants for the exit and follow-up interviews.

Participants in the study were interviewed by female Cambodian data collectors immediately prior to discharge from the index abortion procedure (the exit interview) and again 10 – 14 days

following the procedure (the follow-up interview). Each woman received US\$3 as compensation for participation in the exit interview conducted at the health facility following her abortion. Follow-up interviews were performed at a location of the woman's choosing (the exit interview site, her home, or another private location) and women were reimbursed for any travel costs plus US\$7 for their time.

A total of 160 women were recruited into the study. Of these, 50 women seeking postabortion care were interviewed but are not included in the present analysis. The remaining 110 women presented at the facility with a request to terminate an intact pregnancy. Of these 110 women, 22 women did not return for their scheduled follow-up interview. This analysis is limited to the 88 women who completed both the exit and follow-up interviews and for whom complete cost data is available starting from the time prior to the exit interview and ending at the 2-week follow-up period. A sum of all medical costs, non-medical costs, follow-up costs and lost wages incurred by the woman during and after the termination is reported for the 88 women. There were no statistically significant differences in group characteristics between women who completed the follow-up interview (n=88) and the 22 seeking abortions women who did not return for a second interview.

The structured exit interview questionnaire included information on the woman's sociodemographics, gestational age, and the number and type of visits women needed to terminate the index pregnancy with all biomedical and traditional health care providers. In addition, women were asked to estimate out-of-pocket costs incurred as a result of the abortion, including medical costs (consultation fees, tests, and medicine) and non-medical costs (transportation, food, and childcare). Furthermore, questions were asked concerning the time and wages lost from their normal routine (including work, school, and household duties) by the respondent or other members of her household as a result of seeking or receiving care related to the abortion. The follow-up interview questionnaire included the same questions on resources but was limited to the 10 - 14 day period following the abortion. The primary outcome measures in this study are:

**Medical costs** = Sum of payments for consultation fees, tests, procedures and medicine for all visits related up to the time of the index abortion.

**Non-medical costs** = Sum of payments for child care, food and transport for the woman in the process of obtaining the index abortion.

**Lost income** = Sum of the woman and her family's lost wages or income while seeking and obtaining the index abortion.

**Follow-up costs** = Sum of the medical, non-medical and indirect costs incurred by the woman during the 10 -14 days subsequent to the abortion.

All data on fees, wages, costs and estimated labor values were collected in either Khmer riel (KHR) or United States dollars and converted to US dollars at the rate of US\$1=4,000 KHR at the time of data collection in 2005.

#### Study Related Abortion techniques

Information on the duration of the participant's index pregnancy and the uterine evacuation technique used by the provider at the study recruitment site was recorded for all respondents. Typically abortions are performed using different techniques or pharmaceutical regimens according to the trimester (12-week period) of pregnancy. The preferred surgical technique for abortions up to 12 completed weeks of pregnancy is vacuum aspiration (WHO 2003). However, in many developing country settings, dilatation and curettage (D&C) or sharp curettage is still used. In some instances medication abortion (MA), involving the use of pharmacological agents or medicines to induce an abortion, was used for both first and second trimester pregnancy terminations.

For second trimester abortions either medication abortion or dilatation and evacuation (D&E) are the WHO-recommended methods (WHO 2003). However, in Cambodia an unsafe procedure known as a *Covac* procedure is often used in second trimester terminations. This procedure

involves inserting a condom or catheter filled with oxytocin and saline into the uterus to induce expulsion of uterine contents (Lester 2002).

#### Analysis

Data were entered in EpiData 3.1 and imported into Stata 9.0 for further analysis. Categorical data are presented as frequencies and percentages of non-missing responses. Normally distributed data are presented as means and standard deviations. Data that were not normally distributed, namely parity and cost information, are presented as medians and interquartile ranges (IQR).

All point estimates for medical, non-medical, and indirect costs at the time of the initial exit interview and follow-up costs at the two-week post-procedure interview are presented separately against selected descriptive variables. The total index abortion costs and follow-up costs have been summed to calculate the total cost of the index abortion from the time of the exit interview until two weeks post-procedure. The median total cost is presented against key variables.

#### Results

In 10 of the 88 cases the study recruitment site was not identified as the same location as the first site of care-seeking. These ten women either visited other providers to confirm their pregnancy, seek information, obtain an appointment or seek information or medication to induce the abortion before terminating the pregnancy at the recruitment health facility. These 10 women required more than one visit, including a final visit to the recruitment site, to complete the uterine evacuation. In some cases they visited multiple locations to identify a provider willing to conduct the procedure.

The mean age of the women included in this analysis was 31 years of age. Most women (83%) were married and had already given birth twice. The level of education was low, more than half (61%) of the respondents had not completed primary school. More than one-third of respondents (38%) were not employed.

#### **Insert Table 1**

Most women (87%) presented for abortions in the first trimester of pregnancy. More than twothirds of women obtained an abortion from a private sector provider such as a private midwife (35%), an NGO (17%) or a physician (14%). Among the ten women who visited multiple providers, the first provider approached for information or an abortion shows a similar preference for private sector providers except for two women who initially sought treatment or information about an abortion from a pharmacist. Three-quarters (75%) of women received abortions performed with vacuum aspiration. The remaining one-quarter of the abortions were performed with D&C, one woman reported having a medical abortion and one a *Covac* procedure. Most women (89%) were able to terminate their pregnancies with one visit to a health facility.

## Insert Table 2

The median total cost to obtain the abortion was \$24 for all women (Table 2). An examination of the medical and non-medical direct and indirect costs indicates that the direct medical costs comprise the major proportion of the total cost for all subgroups. Female wage-earners reported a higher total cost spent on the abortion than women with no income.

Both direct and indirect costs for a second trimester abortion were higher than first trimester costs. The total cost for this procedure was almost twice that of a first trimester abortion. The total index cost reported also varied by the type of provider where the woman first sought care. A first visit to a private physician involved the lowest median total cost of \$21; a first visit to a pharmacist for information or care resulted in the highest median cost of \$226. The low medical and non-medical costs combined with no indirect costs contributed to the lowest total costs for respondents who sought care from these physicians as their first option. Study participants who reported visiting a pharmacist first incurred the highest medical, non-medical and indirect costs.

The median total cost of the abortion is comparable whether performed with aspiration (\$26) or D&C (\$28) methods. The use of medical methods for an abortion resulted in the lowest median total cost of \$13. An abortion with a *Covac* procedure costing resulted in the highest median total costs of \$249. Finally, total index costs were substantially greater for women who required multiple visits somewhere to successfully terminate her pregnancy.

The overall median post-procedure costs were relatively low at \$14 but most women spent something for their care after the procedure. These expenses subsequent to the procedure generally follow the same pattern as the total costs reported at the exit interview across all subgroups. Employed women appear to have paid marginally more (\$15) in follow-up costs when compared to employed women (\$14).

The median follow-up costs are almost double for women who had second trimester abortions when compared to first trimester procedures. Respondents who approached a private physician for the abortion as their first choice still continued to report the lowest follow-up costs. Women who approached other providers such as a private midwife, a public sector clinician or went to an NGO for their first attempt to obtain an abortion had median follow-up costs between \$20 for an NGO clinic to a low of \$15 for public sector facilities. The highest median follow-up costs (\$60) were reported by women who approached a pharmacist first to seek information, medicine or treatment for the termination.

The median follow-up costs for abortions performed with vacuum aspiration and D&C resulted in similar post-procedure costs of \$14. In contrast to the higher procedural costs reported by the two women who had a *Covac* abortion, these women reported the lowest follow-up cost (\$4). Only three of ten women who received an abortion with medication reported any followup costs, this median cost was the highest at \$19. Lastly, women who required more health care-seeking visits to access or complete the termination reported higher follow-up costs than those requiring only one visit. Among all women the median total cost for the index abortion was \$41. These expenses combined all expenses up to completing the abortion procedure and any expenses in the two weeks following the procedure. The sums are distributed in the same pattern reflected in the previous cost categories. Women reporting higher wage earnings spent more on their abortions than women who were not employed.

Second trimester terminations involved almost a twofold increase in the total expenses for the abortion procedure. Data were collected from similar numbers of women who reported first approaching an NGO clinic or a private physician. Yet the median total cost for women approaching an NGO clinic was much higher (\$51) than for women who first went to a private physician seeking an abortion (\$22), resulting in the lowest expenses among all types of providers. A small number of women went to a pharmacist for information or abortion services, these women had the highest median total costs at \$286. Women who sought care from private midwives and government health facilities were in the middle of the range of spending with a median total cost of \$38 and \$46, respectively.

Some cost differences were observed related to the type of abortion procedure. The highest median total cost of \$253 was for the two women who reported having Covac's procedures. Women who reported the use of medical or pharmacological methods of abortion spent the least, with a median total cost of \$32. Most women had abortions either with aspiration or D&C methods, they reported spending comparable amounts, at a median total cost of \$42 and \$44, respectively. The number of visits required for successful termination of the pregnancy also resulted in differences in spending, the 11% of respondents who reported multiple visits culminated in a higher median total cost of \$253, compared to \$39 spent by women who required only one visit.

#### Discussion

The results of the study indicate that the median total costs related to obtaining an induced abortion was \$41 substantially more than the cost of most contraceptive methods. In a country where the average per capita income is \$339 per year (Cambodia DHS 2005), this is an expensive proposition when abortion in Cambodia is technically legal and theoretically safe. Results of this study also found that among almost all groups or women regardless of their choice of provider or procedure, the total resources used to obtain and recover from the abortion were more than twice the direct medical costs. As a procedure, abortion is prevalent, approximately 4% of Cambodian women of reproductive age report having had one or more in their lifetime and this is widely believed to be an underestimate (Cambodia DHS 2005). Results of this study indicate that regardless of the type of provider disproportionately high abortion costs are being borne by many. Relying on previous studies that have determined women's motivations for choosing different abortion providers, the lack of easily affordable and safe abortion services in the public sector, unreliable information about the availability of safe services and the need for confidentiality are resulting in limited options and high costs of care (Lester 2002).

Study results indicate that employed women spent more to obtain their abortions in terms of medical fees, non-medical costs and lost productivity. This constitutes an additional burden borne by working women who are already wage earners, they may be willing to pay these additional costs to schedule abortions at their convenience.

The median total cost for the abortion increased two-fold for pregnancies in the second trimester. Second trimester procedures are more complicated, particularly in places such as Cambodia with little training or expertise in appropriate uterine evacuation techniques. A recently conducted facility assessment reported no WHO recommended protocols used for second trimester procedures (Fetters et al. 2006).

Women reported a range of abortion providers approached upon their realization that they were pregnant. In all but ten cases, these first visits resulted in a successful termination. These providers constitute different choices in technical expertise, fees, and access to accurate

information and the impact of these choices on the women's total abortion costs vary significantly. The median total cost of approaching a private midwife was not the lowest cost, indicating that women may be willing to pay more for the convenience of access and confidentiality. Surprisingly, women visiting a private physician first reported the lowest total costs, this seems contradictory to the popular belief that private physicians are safer but more expensive options for abortion care. Additionally, the NGO clinic was the most expensive option in terms of formal providers. Pickering and Huff-Rousselle (2001) report increasing NGO popularity in Cambodia but fees for service have remained a contentious issue – fees are generally set low and are differentiated per geographic area but they lack the benefits of direct subsidies available to public sector facilities. Although only 2 women sought information or treatment from a pharmacist first, they reported the highest costs. In this category all costs, medical, non-medical, post-procedure and follow-up costs, were high. This finding reiterates previous research on unsafe abortion in Ethiopia and Kenya that found abortion care from traditional or non-formal practitioners as or more expensive than a safe and legal abortion (Fetters unpublished 2005; Rogo et al 1999).

Study recruitment sites were selected on the basis of well known private and public sector practitioners characterized by high abortion caseloads, willingness to participate, and assurance of client confidentiality. More than three-quarters of the abortion procedures performed used vacuum aspiration methods. However, the choice of type of uterine evacuation procedure made little difference in terms of the costs of aspiration methods versus D&C. Health system data in other countries indicate that the higher costs for D&C, mostly in terms of more expensive provider time as this procedure is only performed by physicians, are not passed on to clients as service fees (Billings and Benson 2005). Evidence of the cost effectiveness of medical methods of abortion is becoming more common (Winikoff 1995; Elul et al 1999; Weibe and Janssen 2000) and this study maintains that position. The technically challenging and unsafe Covac procedure resulted in the highest total costs of any procedure type. Although only two women reported second trimester abortions, even a well-performed procedure performed at this gestational age carries an increased health risk and high cost to the pregnant woman.

Training providers to adhere to safer WHO recommended medical abortion or dilatation and evacuation protocols may result in lower abortion expenses for Cambodians.

Women requiring multiple visits for the successful termination of the pregnancy also reported high total index costs resulting in a total cost more than six times that of women requiring only one visit. Though only 10 out of the 78 women required multiple visits, it seems likely that they were dealing with subsequent morbidity due to unsafe failed abortion attempts or lack of information about where to seek a safe abortion. Other studies in Cambodia and India point to similar explanations for time-consuming and costly abortion care-seeking; for example, traveling greater distances for treatment of complications of an unsafely performed procedure, limited hours for abortion provision, provider refusal to perform the abortion or the high costs that drive women to seek care elsewhere (Ganatra 2006; Lester 2002). In Cambodia, some providers do not offer elective abortion services in the government facility but will do so in their private clinic, often charging higher prices and further delaying a woman from receiving timely abortion care (Pickering and Huff-Rousselle 2001; Lester 2002).

The study is unique in its longitudinal design and its attention to post-procedure costs. While there appears to be a correlation between high medical costs and high total costs for the abortion, in many cases this trend was not consistent in the costs reported at follow-up. The few women having a *Covac* uterine evacuation procedure and those women with multiple visits who reported high total abortion costs, reported very little spending of time or cash following their abortions. Conversely, women who had abortions with medical methods reported low total costs at the time of the abortion but higher post-procedure costs. Again, women with one visit reported lower initial costs at the exit interview, women who needed multiple visits reported higher follow-up costs than their counterparts during the two-week interview. While some of the inconsistency could be attributed to the nature of the procedure (for example, the medical methods of abortion typically have low initial costs but could result in higher subsequent costs due to the long duration of the procedure), another explanation could be the hidden cost of poor quality of services that showed up post-procedure. The causal relationships cannot be disentangled using this methodology and should be explored in further descriptive research.

This study is descriptive and exploratory. It is based on findings from a sample of women that cannot be considered representative of all women seeking abortion care or of all abortion providers in the country. Safe and legal abortion services in Cambodia are in transition with the introduction of new guidelines for comprehensive abortion care and a new donor-funded project to reduce maternal mortality. However, the prevalence of unauthorized and quasi-legal abortionists or large private income-generating practices for abortion care will probably persist long into the future. Additionally, information on abortifacients, both traditional and modern pharmaceutical methods, continue to be passed along through households and communities as "low-cost effective confidential methods". In reality these methods can be dangerous if misused with varying degrees of safety and efficacy. A further limitation is that estimates of lost wages and productivity due to days missed from work as a result of the abortion seeking process are based on self-reports. These estimates probably under-report the in-kind and domestic labor that women do.

Despite these limitations, our examination of both the direct monetary and indirect "hidden costs" and the subsequent post-procedure expenses more accurately reflect the total cost burden of an induced abortion procedure. More research is needed on the cost and productivity losses associated with the abortion care-seeking process in order to fully understand the cost implications on women's households. Additional qualitative research on these expenses, in particular the pre- and post-procedure expenses, might provide valuable information on how to eradicate some of this burden. Similar research on contraception by method could produce an interesting comparison group for the actual time and cost burden to women and their households who are able to prevent an unwanted pregnancy and those who suffer from an unwanted pregnancy and seek a termination.

## Conclusion

The study underscores the need for safe, accessible and affordable abortion services to ensure health equity for all Cambodian women. Induced abortion is a simple and inexpensive procedure when performed well by a trained health care provider in a hygienic environment. Yet, the lack of accurate information available for women, delays in the implementation of safe abortion services in the public sector, the scarcity of well-trained providers and the proliferation of unregistered providers result in women and their families paying excessively for this procedure. It is necessary to make speedy improvements in these areas, to avoid the continuing disparity in quality and access to safe abortion services that is common for Cambodian women. Excessive and exploitative expenses for abortion care can push economically vulnerable women and their households into further impoverishment and jeopardize the intent of the 1997 abortion legal reform meant to create the opportunity for all Cambodian women to safely control their own fertility.

## References

Billings D and Benson J. 2005. Postabortion care in Latin America: policy and service recommendations from a decade of operations research. *Health Policy and Planning* 20(3): 158-166.

Cambodia Demographic and Health Survey (DHS) 2005. Published by National Institute of Public Health and National Institute of Statistics Phnom Penh, Cambodia and ORC Macro, Calverton, Maryland, USA December 2006.

Elul B, Ellertson C, Winikoff B, Coyaji K. 1999. Side Effects of Mifepristone-Misoprostol Abortion Versus Surgical Abortion Data From a Trial in China, Cuba and India. *Contraception* 59:107-114

Fetters T, Vonthanak S, Rathavy T, Picardo C. 2006. Research brief: A national assessment of the magnitude and consequences of abortion and abortion complications in Cambodia. Ipas, Chapel Hill, NC, USA.

Ganatra B. 2006. Unsafe abortion in South and South-East Asia: a review of the evidence. In Warriner, I. K. and Iqbal Shah, eds. *Preventing Unsafe Abortion and its Consequences: Priorities for Research and Action*. New York, Guttmacher Institute 151-186.

Hill PS, Heng TL. 2004. Women are Silver, Women are Diamonds: Conflicting Images of Women in the Cambodian Print Media. *Reproductive Health Matters* 12(24):104-115.

Pickering H, Huff-Rousselle M. 2001. Crossing the public-private sector divide with reproductive health in Cambodia: out-patient services in a local NGO and the national MCH clinic. *International Journal of Health Planning and Management* 16:33-46.

Potdar R, Fetters T, Phirun L. 2007. Initial Loss of Productive Days and Income among Women Seeking Induced Abortion in Cambodia. *Journal of Midwifery and Women's Health* (forthcoming)

Lester F. 2002. Abortion in Cambodia: An Overview of the Current Situation. UC Berkeley/ UC San Francisco Joint Medical Program & UC Berkeley School of Public Health, Maternal and Child Health.

Long C, Ren N. 2001. Abortion in Cambodia Country Report. Paper presented at Expanding Access: Midlevel Providers in Menstrual Regulation and Elective Abortion Care, South Africa.

Rogo K, Bohmer L, Ombaka C. 1999. *Community level dynamics of unsafe abortion in Western Kenya and opportunities for prevention: Summary of recommendations and findings from pre-intervention research*. Los Angeles, Pacific Women's Institute:

Royal Kingdom of Cambodia. 1997. Unpublished translation of the *Kram* on Abortion. November 12.

Vlassoff M. 2006. Economic Impact of Abortion-Related Morbidity and Mortality: Modeling Worldwide Estimates, paper commissioned by the Hewlett Foundation

Weibe E, Janssen P. 2000. Time Lost from Work Among Women Choosing Medical or Surgical Abortions. *The Jacobs Institute of Women's Health*. Published by Elsevier Science Inc. Women's Health Issues. 10(6).

Winikoff B. 1995. Acceptability of medical abortion in early pregnancy. *Family Planning Perspectives* 27:142-8.

World Health Organization. Health and Economic Productivity. 1999. *Population and Development Review* 25(2):396-401.

World Health Organization. 2003 *Safe Abortion: Technical and Policy Guidance for Health Systems*. World Health Organization, Geneva.

Mean age (years)	31	(SD 7.7)
Median number of previous	2	
births	2	(IQR 3)
	n	%
Marital Status		
Married	73	(83)
Single	15	(17)
Education		
< primary school	54	(61)
Completed primary school	13	(15)
Completed secondary school	24	(24)
or higher	21	(24)
Employment		
Employed	55	(62)
Not employed outside home	33	(38)
Trimester of index pregnancy		
First trimester	78	(87)
Second trimester	4	(5)
Missing	6	. ,
Recruitment site		
Private midwife	31	(35)
Government hospital or health		
center	30	(34)
NGO clinic	15	(17)
Private physician	12	(14)
Provider sought at first visit		
Private midwife	30	(34)
Government hospital or health	26	(20)
center	26	(30)
NGO clinic	17	(19)
Private physician	13	(15)
Pharmacist	2	(2)
Type of uterine evacuation		
procedure for index abortion		
Aspiration methods	66	(75)
Dilatation & curettage (D&C)	10	(11)
Medical methods of abortion	10	(11)
Covac procedure	2	(3)
Number of health visits		
seeking		

# Table 1. Description of women seeking an induced abortion at ten facilities in Cambodia, November-December 2005, (N=88)

the index abortion	
1 visit	78 (89)
2-3 visits	10 (11)

characteristics, Cambodia 2005 (N=88)	(N=88)						
	۲	Medical Costs	Non-Medical Costs	Lost Wages	Total cost to obtain the abortion	Costs incurred after the abortion (Follow-up Costs)	Total abortion cost + Follow-up costs
Overall cost	88	20	1	0	24	14	41
Employment	l						:
Employed Not Employed	55	20		<del>с</del> с	26	14	46
Trimester of index pregnancy	с с	CT	-	D	17	CT	00
First trimester	78	18	Ч	0	23	15	38
Second trimester	4	25	сı	15	44	22	65
Provider sought at first visit							
Private midwife	30	18	1	0	23	16	38
Government hospital or health center	26	16	1	0	22	15	46
NGO clinic	17	25	1	7.5	33	20	51
Private physician	13	18	2	0	21	£	22
Pharmacist	2	116	10	100	226	60	286
Type of uterine evacuation procedure	0.						
Aspiration methods	99	20	1	0	26	14	42
Dilatation & curettage (D&C)	10	19	ъ	4	28	14	44
Medical methods of abortion	10	13	1	0	13	19	32
Covac procedure	2	160	10	80	249	4	253
Number of health visits seeking the index abortion							
1 visit	78	20	1	0	23	15	39
2-3 visits	10	160	10	80	249	4	253

Table 2. Median costs in US dollars reported by induced abortion patients by selected socio-demographic variables and abortion