



SUMMARY LIST OF EVIDENCE



I. EMERGENCY TREATMENT

Strong Evidence

MVA, VA and Sharp Curettage: Effectiveness and safety of MVA and sharp curettage

- MVA is as effective as sharp curettage for treatment of first trimester incomplete abortion (pg. 30)
- Women undergoing MVA and VA procedures had significantly decreased bleeding seven days post evacuation than women undergoing sharp curettage (pg. 31)
- MVA has low complication rates (pg. 32)
- The use of systemic analgesia with sharp curettage for incomplete abortions with dilated cervix up to 14 weeks is safe, effective, has a smaller chance of requiring a blood transfusion, and does not require the use of the operating theater (pg. 33)
- The use of general anesthesia with suction curettage is associated with increased risks of blood loss, cervical injury, uterine perforation, and subsequent abdominal hemorrhage (pg. 33)
- Using MVA for PAC instead of sharp curettage can reduce the length of hospital stays (pg. 34)

Cost comparisons of MVA and sharp curettage

- Using MVA for PAC instead of sharp curettage along with associated changes in protocols and an improved service delivery model can significantly reduce costs of care in most cases. (pg. 49)

Misoprostol for PAC: Effectiveness and Safety

- Use of misoprostol to evacuate the uterus after early pregnancy failure can completely evacuate the uterus reducing the need for surgical evacuation (pg. 39)
- Medical management of early pregnancy failure using misoprostol is more effective than expectant management in reducing the need for surgical evacuation (pg. 50)
- Misoprostol given either orally or vaginally for treatment of early pregnancy failure can completely evacuate the uterus 50 to 96 percent of the time reducing the need for surgical intervention (pg. 52)
- Misoprostol can be administered orally, sublingually, or vaginally with good results. Optimal dose/route combinations have not been firmly established. (pg. 56)
- Side effects of misoprostol include chills, fever, nausea, vomiting, diarrhea and headache, but are generally mild and self-limiting (pg. 58)
- Women experiencing first trimester pregnancy failure treated with misoprostol experience slightly more blood loss compared to women treated with surgical evacuation, but the difference is not clinically significant (pg. 59)

Pain Management: Effectiveness and safety

- Women require pain management for emergency treatment with sharp curettage and VA (pg. 64)
- Use of paracervical block using 1% lidocaine showed marked reduction in pain for patients undergoing MVA treatment (pg. 65)



- There is no significant difference in severity of pain for MVA PAC patients receiving paracervical block with 1% lidocaine compared to those receiving no anesthesia. Neither the paracervical block technique nor psychological support alone is sufficient in pain management for PAC patients undergoing MVA (pg. 66)

Enough Evidence for Action—Needs More Research

Privacy and confidentiality in history and physical assessment

- Women want privacy and confidentiality during the taking of their history and physical assessment (pg. 27)

Needs More Research

MVA, VA and Sharp Curettage: Cost comparisons of pain management techniques

- Switching to MVA from sharp curettage can cause an initial increase in cost due to improved quality of care resulting in increased cost for supplies and medications (pg. 45)
- MVA can be performed safely in a primary care setting with a referral system available for those requiring higher level care (pg. 45)

Footpump Suction Vacuum Aspiration: Effectiveness and safety

- MVA and foot pump suction evacuation (FSE) are equally effective for uterine evacuation following first or second trimester incomplete abortion (pg. 46)

Misoprostol for PAC: Effectiveness and safety

- Use of misoprostol to evacuate the uterus after early pregnancy failure can increase patient satisfaction (pg. 58)

Misoprostol for PAC: Cost Comparisons

- Use of misoprostol for treatment of uncomplicated early pregnancy failure is less costly than either expectant management or surgical intervention (pg. 60)

Use of prophylactic antibiotics for incomplete abortion

- There is not enough evidence to determine whether women presenting with incomplete abortion should be routinely provided prophylactic antibiotics. (pg. 62)

Pain Management: Effectiveness and safety

- Use of systemic analgesia and patient controlled sedation can effectively manage pain for MVA procedures for women with incomplete spontaneous abortions (pg. 67)
- Women who experience spontaneous abortions without surgery report the need for analgesia (pg. 67)



II. FP COUNSELING AND SERVICE DELIVERY; STI EVALUATION AND TREATMENT; AND HIV COUNSELING AND/OR REFERRAL FOR TESTING

Strong Evidence

Post Emergency Treatment Counseling

- Offering family planning counseling and methods at the same location where the woman receives emergency treatment can increase the proportion of women leaving with a contraceptive method (pg. 73)
- Counseling patients in family planning methods will increase family planning uptake (pg. 75)
- Women who experience either induced or spontaneous abortion and desire another pregnancy should wait at least six month before becoming pregnant again to reduce the incidence of maternal anemia, premature rupture of membranes, low birth weight and preterm delivery in the next pregnancy (pg. 76)
- Postabortion family planning counseling and services reduces repeat abortions (pg. 77)
- PAC delivery models that provide on-site FP counseling and contraceptives can result in a) women using highly effective contraceptives, b) fewer unplanned pregnancies, and c) reduced repeat abortions one year later (pg. 78)
- Providing family planning counseling can increase the proportion of women agreeing to use a contraceptive method before leaving the health facility that provided PAC (pg. 79)
- Improving counseling and clinical skills can increase the proportion of women being discharged with a contraceptive method and an expanded method mix (pg. 79)
- IUD use postabortion does not increase the incidence or severity of early complications (pg. 81)
- Use of IUDs in the immediate postabortion period is safe (pg. 81)
- Women who choose to use IUDs or Norplant after abortion, find both contraceptive methods safe and highly effective (pg. 82)
- Use of IUDs after spontaneous and induced abortions is both safe and highly effective (pg. 83)
- The availability of free contraceptive commodities may increase the likelihood patients will report that they intend to use a contraceptive and will be discharged with a method (pg. 84)
- Providing on-site counseling and access to free contraceptives following emergency treatment can result in a) increased use of highly effective contraceptives, b) decreased unplanned pregnancies, and c) reduced repeat abortion (pg. 86)

Male involvement with counseling and family planning service delivery

- Hospital policies that ban men from obstetrical and gynecology wards make it difficult for male involvement and discourage male participation (pg. 87)
- After receiving the patient's expressed and informed consent, counseling husbands of PAC patients separately on follow-up care, return to fertility, and family planning can increase family planning usage and physical, material, and emotional support for PAC patients during recovery. (pg. 88)



- Many male partners want more information about their partners' conditions during PAC and more information on family planning (pg. 87)
- Many women want their husbands present for counseling associated with PAC (pg. 90)
- Many women want their partners to be informed about their conditions, treatment they are receiving, follow-up care, and family planning methods they intend to use (pg. 91)
- Bacterial vaginosis significantly increases the risk of spontaneous abortion nearly 10-fold (pg. 94)

HIV Counseling and Testing

- Women who are HIV positive are at an increased risk for spontaneous abortion (pg. 96)

Other counseling concerns related to postabortion care: Psychological sequelae

- Women may report suffering negative psychological effects after a spontaneous abortion (pg. 102)
- Some women presenting for PAC may have been compelled to have abortions and may experience guilt and/or immediate or long-term regret (pg. 104)
- Nineteen to 27 percent of women who have induced abortions may report anxiety and depression ranging in duration from one month to two years after the event (pg. 104)
- Between 27 and 39 percent of women seeking abortion have been victims of abuse sometime during their lifetime (pg. 109)
- Physical violence is associated with an increased risk of spontaneous abortion (pg. 112)

Enough Evidence for Action—Needs More Research

Male involvement with counseling and family planning service delivery

- Men need counseling on when sexual relations can resume following PAC (pg. 91)
- Male partners desire to understand more about emergency treatment; care of the woman after the procedure; causes for women's health problems; and contraceptive methods (pg. 92)
- Adolescent PAC patients may have substantially older male partners (pg. 93)

HIV Counseling and Testing

- Women accessing PAC services often do not receive STI and HIV prevention and care information or services due to lack of training by physicians and midwives in dual protection (pg. 95)
- Information is lacking on the needs of HIV positive women in relation to unplanned pregnancy (pg. 98)

Needs More Research

Post Emergency Treatment Counseling

- Information and counseling on PAC treatment costs; follow-up home care; and affect on future pregnancies influences a woman's satisfaction with PAC (pg. 72)



Male involvement with counseling and family planning service delivery

- Women experiencing two or more spontaneous abortions have a high prevalence of toxoplasmosis gondii compared to women without this same history. The extent to which toxoplasmosis causes habitual abortions remains controversial (pg. 94)

HIV Counseling and Testing

- Asymptomatic HIV positive adolescents on antiretroviral therapy are at no greater risk for spontaneous abortion, IUFD, IUGR or fetal, infant, or maternal death (pg. 97)



III. COMMUNITY EMPOWERMENT THROUGH COMMUNITY AWARENESS AND MOBILIZATION

Strong Evidence

Reducing the incidence of spontaneous abortions can reduce the need for PAC

- There is a strong association between malaria in pregnancy and an increased risk of spontaneous abortion (pg. 129)
- Exposure to environmental contamination including pesticides and fungicides can increase the incidence of spontaneous abortion (pg. 129)

Enough Evidence for Action—Needs More Research

Health promotion for PAC

- Volunteer health promoters can provide family planning counseling and distribute contraceptive methods, thus, increasing contraceptive acceptance (pg. 121)
- Pre-intervention PAC research shows that involvement of community members can raise awareness of PAC services; identify barriers at the community level (i.e., quality and quantity of services and lack of emergency transport); and strengthen referral systems by incorporating families and community-based providers (pg. 122)
- Health action-education campaigns using community health workers can identify pregnant women, provide them with information on danger signs of pregnancy and contraception, and can help increase the numbers of women who seek skilled attendance (pg. 124)
- Multiple community-based educational strategies, including women's groups and radio messages can effectively increase knowledge of danger signs in pregnancy (pg. 125)
- Community education and mobilization efforts can increase blood banking and decrease primary postpartum hemorrhage fatality rates (pg. 127)

Needs More Research

Health promotion for PAC

- Community education efforts can increase the awareness of PAC services and enhance the quality of and access to PAC programs (pg. 120)
- Community-based health worker education can enhance access to PAC programs (pg. 120)
- PAC services are needed even in contexts where abortion is legal (pg. 122)
- Community participation and support for community emergency transport systems leads to better care for pregnant women and sustained links between the communities and health facilities (pg. 123)
- Community-based programs can increase participation by women in community decision-making more generally (pg. 126)
- Community-based women's savings and credit groups can provide a forum for women to discuss sensitive topics, and community education efforts can increase use of services (pg. 127)



- Community education efforts can help reshape social norms surrounding PAC and knowledge of consequences of unsafe abortion including reliance on traditional healers for PAC services and acceptance of adolescents' use of contraceptives (pg. 128)

Reducing the incidence of spontaneous abortions can reduce the need for PAC

- Smoking and exposure to smoke during pregnancy may increase the risk of spontaneous abortion (pg. 130)
- High levels of caffeine consumption during pregnancy can increase the risk of spontaneous abortion (pg. 132)



IV. POLICY, PROGRAM, AND SYSTEMS ISSUES RELATED TO DELIVERY OF POSTABORTION CARE SERVICES

Strong Evidence

Provider Training for PAC: In-service Training

- In-service PAC training can increase the number of PAC patients who report that they received important information on their care regardless of whether sharp curettage or MVA was used (pg. 138)
- In-service PAC training can increase the number of PAC patients who report that they received important information on their care (pg. 139)
- In-service PAC training can increase the number of PAC patients who report receiving sufficient information to make an informed choice on contraception and who leave the hospital with a contraceptive method (pg. 140)
- In-service PAC training can increase the number of PAC patients who receive family planning counseling and leave the hospital with a contraceptive method (pg. 141)
- In-service clinical and counseling training can lead to increased use of MVA and increased numbers of PAC patients who receive family planning counseling and who leave the PAC facility with a contraceptive method (pg. 143)
- Training increases physician satisfaction with MVA (pg. 147)
- Training providers can result in increased counseling of PAC patients regarding emergency treatment and follow-up home care (pg. 148)
- Training providers can increase counseling of PAC patients concerning family planning options and the intention of PAC patients to use family planning (pg. 149)
- Training midwives to counsel PAC patients on family planning, STIs/HIV and nutrition (in addition to midwives undertaking other aspects of PAC, including emergency treatment using MVA) can increase counseling on these topics (pg. 153)

Systems Issues for Delivery of PAC Services: Who Can Provide PAC Services

- Allowing trained midwives to provide PAC (using MVA) will help increase access to PAC services (pg. 163)
- Use of dedicated FP nurse/counselors as compared to FP referrals for contraceptives can increase immediate contraceptive acceptance for PAC patients (pg. 165)

Increasing Access to Care, Including Types of Facilities that Provide PAC

- Providing family planning counseling and services in the same place as emergency treatment can increase patients' knowledge and intent to use family planning (pg. 168)
- Health policy changes, including developing and disseminating protocols and service delivery guidelines for PAC and reorganization of services, are needed to institutionalize PAC in hospital settings or provide PAC as an outpatient procedure (pg. 168)
- Providing contraceptive technology updates and counseling workshops for providers at the primary level can increase postabortion family planning counseling and method provision prior to discharge (pg. 175)



Ensuring Quality of Care Including On-Site Quality Improvement Techniques

- Improving the quality of care of PAC, whether MVA or sharp curettage is used, reduces the average length of stay in hospital facilities (pg. 177)
- Providing counseling on post procedure complications; follow-up care at home, return to fertility, and contraceptive methods; and providing empathy and support improves the quality of care of PAC (pg. 178)

PAC for Women in Countries Where Abortion is Legal and Available

- PAC services are needed even where abortion is legal (pg. 180)

Scaling up and Sustainability

- PAC programs can be scaled up (pg. 185)

Enough Evidence for Action

Provider Training for PAC: Pre-service Training

- Providing pre-service training to physicians can result in increased use of MVA over sharp curettage (pg. 137)

Provider Training for PAC: In-service Training

- Training of providers can improve clients' knowledge of emergency treatment and follow up care (pg. 145)
- Training in MVA can result in the use of MVA as well as sharp curettage (pg. 145)
- Training providers to improve the quality of postabortion care can increase women's positive evaluations of quality of care, acceptance of contraceptive methods, and satisfaction with the methods (pg. 150)
- Involving private providers in providing PAC services can increase emergency treatment and family planning counseling and services in communities (pg. 152)
- Training private nurse midwives can improve their knowledge scores concerning PAC (pg. 154)

Systems Issues for Delivery of PAC Services: Infection prevention, standard precautions, and instrument processing

- PAC training on infection prevention can increase infection prevention measures by physicians and staff (pg. 158)

Increasing Access to Care, Including Types of Facilities that Provide PAC

- Increasing linkages and referrals between clinic-based health practitioners and community-based providers may increase more timely access to PAC (pg. 175)
- Increased distances to health facilities is associated with decreased access to emergency obstetric care; increased hemorrhaging and length of hospital stay; and increased maternal and neonatal mortality rates (pg. 176)



Enough Evidence for Action—Needs More Research

Provider Training for PAC: In-service Training

- Training of providers in postabortion family planning and fertility can increase promotion of condom use and promotion of more effective methods of contraception, in addition to correct counseling concerning a PAC patient's return to fertility (pg. 144)
- Training can increase the use of pain medication for PAC patients (pg. 146)
- Training providers can change provider attitudes toward PAC patients (pg. 149)

Ensuring Quality of Care Including Use of On-Site Quality Improvement Techniques

- Provider attitudes and behavior toward PAC patients can lead to delay in seeking care (pg. 179)

Needs More Research

Provider Training for PAC: Peer Support

- Providing peer support may be a useful tool for supervision (pg. 156)

Scaling up and Sustainability

- Research on PAC can be used for policymakers to support expanding PAC programs and nationwide PAC protocols (pg. 184)
- Integrating family planning counseling and services into safe motherhood programs will assist in achieving sustainability of PAC (pg. 184)

Systems Issues for Delivery of PAC Services: Commodities and Logistics

- Lack of basic supplies such as disinfectant solutions can lead to the overuse of antibiotics (pg. 159)