Manual Vacuum Aspiration (MVA) vs. Sharp Curettage for the Care of Women Seeking Legal Abortion in Chile's Public Health System

Findings and Key Recommendations

Purpose and Methodology:

This summary presents the results of the research carried out in 2017 by Miles Chile and Ipas,[1] with the purpose of exploring the benefits of manual vacuum aspiration (MVA) in comparison to sharp curettage for uterine evacuation (UE). Additionally, the study inquired about the challenges and opportunities for the expansion of MVA within the Chilean health system, taking into consideration Law 21.030. Enacted on August 21st, 2017, this legislation authorized legal abortion for three indications: danger to a woman's life, fetal malformations incompatible with life, and pregnancy due to rape.

In the first stage, a literature review was completed using international scientific journals, comparing the use of MVA and sharp curettage for UE. In total, 19 studies from 11 countries were analyzed. Study sample sizes ranged from 60 to 1,129.

In the second stage, a convenience sample of seven providers was interviewed at the healthcare facilities tasked with providing comprehensive abortion care (CAC). Each of the providers interviewed met at least one of the following selection criteria: i) healthcare professional currently responsible for providing MVA services as part of the pilot initiative led by the Ministry of Health of Chile; ii) participant in at least one Ipas comprehensive abortion care training; iii) stakeholder in public health services provided to women seeking post-abortion care. The professionals interviewed included four physicians, two residents, one gynecologist, and one midwife. Two of these professionals are men and five are women, aged 26 to 59 years.

In the third stage, a purposive sample of 32 women who received postabortion care with MVA was recruited from two hospitals in Santiago, Chile. A structured questionnaire was administered to each woman in person. Women's ages ranged from 18 to 44 years, with an average age of 30 years. The questionnaire was developed based on an existing Ipas questionnaire that seeks to explore patients' assessments of postabortion care, including wait times, pain management, behavior of the healthcare professionals involved in their care, and the information that was offered to them.

Results:

In the scientific literature on both techniques, it is evident that sharp curettage is still being included in the clinical training programs of healthcare professionals in many countries. In countries like Chile, this has presented a challenge for the dissemination and implementation of new technologies such as MVA. The scientific literature is conclusive: MVA is more beneficial for women. In the table below, we present a comparison of clinical benefits of MVA and sharp curettage according to the literature reviewed:

Clinical benefits according to the scientific literature: **MVA** vs. **Sharp Curettage**

	MVA	Sharp Curettage
Low incidence of complications	✓	
Portable and requires minimal space for storage	✓	✓
No electricity needed	✓	✓
Quiet	✓	✓
Outpatient use, without general anesthesia	✓	
Brief procedure and rapid recovery	✓	
Requires minimal investment of resources and staff	✓	✓
Minimal pain and high level of patient satisfaction	✓	
Cost-effective	✓	

[1] The researchers who conducted this study were: Claudia Dides, Constanza Fernández, and José Manuel Morán, of Miles Chile. We invite you to visit www.ipas.org and http://mileschile.cl/ to learn more about these organizations.

Below, we present a summary of the most salient findings from interviews with Chilean healthcare providers, taking into consideration the literature review and results from surveys administered to women who underwent MVA for postabortion care.

Safety and Effectiveness

Several healthcare providers recognize that there are fewer risks associated with MVA when compared to sharp curettage. They highlight the increased risk of **uterine perforation** due to the use of the curette, complications with the **administration of general or spinal anesthesia,** and **infections or injuries** that can cause infertility. According to one provider, "clearly, MVA has many advantages over [sharp] curettage … that is, in Chile, we have had at least one maternal death due to curettage, and with MVA, we've never recorded any deaths."

Additionally, when complications do arise with sharp curettage, they can have dramatic consequences for women. In the words of one provider, "[Following a sharp curettage procedure], the adverse [event] that one is most afraid of is [uterine] perforation, but there may also be tears to cervical or uterine arteries, which has happened… we had a sharp curettage case that finally ended in a hysterectomy, because [the patient] did not stop bleeding, and we ended up having to open her up. [With MVA], I have not had any such cases."

Similarly, the effectiveness of the procedure is understood among most of the providers under two main themes: time and resources, both reflected in the scientific literature as positive aspects of MVA. Regarding time, providers express that MVA can be done quickly, because the technique is simpler and requires coordination with fewer specialized health-care staff (e.g., anesthesiologists). In some cases, this can cause a sharp curettage to be postponed for hours or up to several days, "…sharp curettage patients are those who are left for the end of the shift; in general, they always spend six or eight hours [in the facility] at a minimum; that is the average. And the MVA patients, if they are dilated, [receive their care in] about 20 minutes or half an hour." MVA effectiveness is also supported by the women we interviewed: 81% of women expressed being satisfied with the wait times to receive their MVA procedure.

Additionally, some providers recognize that the speed with which MVA is performed and the short recovery time compared to sharp curettage also benefits patients, who often have to re-organize their schedules to be able to receive care, taking into consideration childcare and/or missed work days. Others consider that the benefits are reflected in women's mental health, because a patient can quickly return to her family after leaving the hospital. In terms of resources used, most providers consider MVA to be more cost-effective due to the need for fewer medical supplies, surgical space (MVA does not require an operating room), lower rate of complications, and specialized personnel required to perform the procedure.

These observations align with several studies on the subject, which confirm that MVA results in reduced costs for healthcare systems. For example, studies from other countries report a 64% reduction in total costs when comparing MVA to sharp curettage.[2] In this case, it was not possible to identify the amount of cost savings to the Chilean healthcare system, since this would require an analysis at the health facility level. This is because the country's main healthcare insurer, "FONASA," uses the same reimbursement code for both UE procedures completed using MVA and those completed using sharp curettage.

Perception of MVA as Less Invasive

Providers perceive that MVA is a less invasive technique, which corresponds to the literature on this subject. Although it is clinically recognized that MVA is an invasive procedure, providers consider it to be more comfortable for the patient. For some, what marks the difference between MVA and sharp curettage regarding the level of invasiveness is the use of spinal anesthesia for sharp curettage, "…the fact that you do not have to put a patient to sleep, do not have to puncture her spine, in terms of having to put anesthesia into the spinal canal—this makes it different, much less invasive."

Ease with Which Clinicians Gain Competence in the MVA Technique

Providers who have been trained in the MVA technique perceive it as simple, easy to learn, and easy to teach. Providers express that this aspect of the MVA technique may help increase the uptake of MVA for routine UE procedures among Chilean healthcare providers. According to the literature, the ease with which health-care professionals can acquire the clinical skills needed to perform MVA increases patient's access to this important abortion technology. This is because a wider range of healthcare professionals (e.g., mid-level providers) can perform the procedure with a high level of safety, a conclusion that is also supported by the World Health Organization.

[2]Choobun, Khanuengkitkong, and Pinjaroen. (2012). A comparative study of cost of care and duration of management for first-trimester abortion with manual vacuum aspiration

Linkages to Improved Contraceptive Care

Some providers commented that the smaller number of healthcare professionals needed to perform MVA compared to sharp curettage favors the creation of a more intimate space, allowing them to provide information about contraception to their patients. However, at some sites, providers comment that even when they want to, the attitudes of providers themselves and/or institutional processes for offering contraception to patients work as barriers to ensuring women's timely access to their chosen contraceptive method. This is an important gap, given that the comprehensive abortion care model supported by the literature, Ipas, and other organizations includes timely access to contraceptive counseling and delivery of contraceptives during provision of care. One provider confirmed, *"…in the area where sharp curettage is offered [in my facility], it [contraception] is not offered, and at discharge it will depend on the attending provider. There are some providers who offer it and some who don't. Regarding MVA, people who perform MVA are a bit more informed, so in general, they tend to offer contraceptive counseling."*

Compassionate Care

According to the interviewees, the fact that the patient is awake during the procedure, the possibility that she may feel pain due to the use of local versus general anesthesia, and the novelty of MVA in the Chilean context, cause the medical community to pay more attention to the details of patient care, thereby enhancing the quality of the care they provide and improving patients' care experience. Sharp curettage, on the other hand, is performed when the patient is under the effects of spinal anesthesia [and] does not allow direct interaction with the woman: *"[MVA] creates a closeness with the patient, because the treatment is different … pain management [is discussed] directly with the patient, so you make a closer connection, which also creates another type of bond beyond just providing a service."*

Women's perspectives on interactions with their providers also reflect this opportunity to communicate about healthcare-related topics: 78% of women surveyed reported that their provider informed them that if they do not use contraception, they could become pregnant again soon after their procedure; and almost 88% reported that their provider asked if they had any doubts or concerns about the procedure. Along similar lines, some providers commented that the use of MVA allows the care environment to be more intimate due to the smaller number of healthcare professionals needed for the procedure. However, providers confirmed that patients often remain in waiting and recovery alongside other patients, some of whom are pregnant or have recently given birth. Such cases do not represent compassionate care environment and can cause distress for women undegoing abortion.

MVA in the Chilean health system: Barriers

Comfort of Healthcare Professionals: **MVA** vs. **Sharp curettage**

As a counterpoint to the simplicity of training for the MVA technique, it is important to mention that providers also consider sharp curettage to be an easy procedure to learn, particularly in Chile, where the MVA technique has not historically been taught in clinical training programs. Therefore, it is more likely that Chilean healthcare providers have been exposed to sharp curettage from an early stage of their careers.

Additionally, some providers expressed that there is a gap between generations of healthcare professionals. They consider that younger generations are more open to the use of MVA for abortion care. Although some providers mentioned their efforts to ensure the inclusion of MVA training in medical residency programs, several felt that there is a need to expand these efforts. The medical community's resistance has led to cases in which a provider does not offer patients who are candidates for MVA access to the procedure, opting instead for sharp curettage due to personal preference and their own level of comfort with the technique: *"…introducing a new method to older gynecologists has been more difficult… if the physician is more recently trained or an older gynecologist who has accepted the new procedure, then the patient receives complete information [about her treatment options]; there is no drama, versus … an older gynecologist who is not in agreement with the new technique, who offers them [sharp curettage]—that option, and nothing else."*

According to interviewees, there is a lot of misinformation in the medical community regarding scientific studies that show the benefits of MVA over sharp curettage, *"…the truth is that we are just recently reaching the medical community, midwives, and the network, in the name of this being a streamlined discussion, …we are just now beginning to address the myth that MVA is more complicated than sharp curettage."*

Discomfort and/or Lack of Knowledge Regarding Models of Accompaniment

Some providers believe that the fact that the patient is not put under anesthesia during the MVA procedure requires that the provider have a higher level of interaction with her, which entails the need to create a comfortable environment and implies a model of accompaniment throughout the procedure to ensure comprehensive care. Several providers believe that this reality has caused some uncertainty and even resistance among providers accustomed to less interaction with their patients, since they perceive that having to accompany a patient during the procedure can extend the care process, even though the average time required to perform MVA is shorter than the time required to perform sharp curettage.

Lack of Linguistically and Culturally Appropriate Care

Given the higher level of interaction with the patients during MVA, some professionals expressed difficulties in serving immigrant and/or non-Spanish-speaking patients. They shared that many such patients are from countries such as Haiti, with a language and culture that are unfamiliar to most Chilean healthcare providers; highlighting the need for these factors to be taken into consideration during patient care: *"I believe that the biggest problem we face today [is that] 30% of the population we have is foreign, of which… there is a large percentage that does not speak Spanish. And to be able to perform this type of procedure, you still need the patient's cooperation; you need to be able to talk to her, distract her, be there for her… or you can simply do a sharp curettage and sedate her completely."*

Beliefs Surrounding Pain Management

Some providers perceive that the spinal anesthesia given to patients undergoing sharp curettage represents an advantage with regard to pain management, despite the risks involved in using this technique. Several studies have shown that pain during the MVA procedure can be successfully managed with the use of local anesthesia and that postabortion pain goes away more quickly after MVA compared to sharp curettage.

The belief from some providers that pain during MVA is very difficult to manage is exemplified in this quote from a provider who uses fentanyl to control their patients' pain, which increases the risk of complications during care, *"[**MVA**] also requires training on the use of paracervical anesthesia; it requires training and not all patients are doing so well [with it]. There are women who are in pain, and in that case, I prefer to administer fentanyl, which is like more powerful morphine, because I also believe that it does not make sense for women to feel pain if you can take it away."*

The majority of women surveyed indicated that they received adequate pain management. One in four reported not feeling any pain, and almost 62% reported having felt "some" pain or "very little" pain. It should be noted that the healthcare facilities in which MVA is performed only recently incorporated this technique at their facility.

Beliefs on MVA and Induced Abortion

During the data collection period for this study, abortion was legally banned without exception in Chile. In the context of this total prohibition, some providers expressed an association of MVA with illegal abortion, highlighting the flexibility that this technique offers for terminating a pregnancy, given the limited human resources and infrastructure that it requires, as well as the possibility to provide MVA as part of ambulatory care services. According to these providers, broader implementation of MVA in Chile could allow a surge in the number abortions induced clandestinely: *"The fear related to **MVA**… is that people who are against abortion feel that … it may be a way for physicians to perform illegal abortions, in an easy manner, because it does not require hospitalization. So, I think that issue is the strongest resistance that the introduction of this technique has seen here."* This observation highlights the importance of supporting efforts to expand knowledge on MVA in Chile among healthcare professionals, since other clinical uses for MVA are not considered (ex. uterine bioposy, postabortion care).

RECOMMENDATIONS

Although there are barriers to the implementation of **MVA** in Chile, the literature is conclusive: **MVA** is safer and more efficient compared to sharp curettage; and, together with medical abortion, it represents the gold standard for **UE**. Taking this reality and the study's findings into consideration, we offer the following recommendations to advance the implementation of the **MVA** technique within the Chilean health system, and thus guarantee the highest quality of care for women seeking both abortion or postabortion care:

1. Disseminate scientific evidence on the benefits of the use of MVA to decisionmakers (e.g., ministry of health officials, department heads, etc.) in order to standardize MVA as the preferred technique worldwide for the care of women undergoing abortion, alongside medical abortion.

2. Support health authorities in the inclusion of MVA as recommended technology in guidelines related to healthcare services for women seeking abortion or postabortion care.

3. Collaborate with institutions that train health professionals, clinical training programs, and national medical associations, to ensure that medical providers have the knowledge and skills necessary to perform MVA and accompany their patients throughout the care process.

4. Facilitate skill-strengthening processes to improve use of MVA among health professionals working in health facilities that provide legal abortion care and postabortion care. As part of this process, consider the use of theories of behavior change to encourage the uptake of MVA as a preferred technique for UE.

5. Support providers trained in MVA to ensure adequate pain management through the use of paracervical anesthesia (paracervical block) and non-pharmacological methods, informed by comprehensive accompaniment models.

6. Collaborate with healthcare facilities to strengthen counseling during the abortion care process, in addition to the availability and timely supply of contraceptive methods that consider the women's contraceptive preferences and needs.

7. Strengthen the capacity of the Chilean health system to provide culturally and linguistically appropriate UE care, to ensure high-quality care and respect for the human rights of every woman undergoing abortion/postabortion care.

8. Make infrastructural improvements to the healthcare facilities where women receive abortion and postabortion care in order to prevent women from having to recover from their procedure in areas shared with patients who have received other types of services, such as perinatal care.

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