

IN THE LITERATURE: PEER-REVIEWED ARTICLE

How Should Intensity and Duration of Pain Inform Standard of Care for Pain Management in Non-Labor and Delivery OB/GYN Procedures?

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Abstract

Pain experienced during gynecologic exams and procedures is dismissed, not recognized, and undertreated by some clinicians. This article considers how duration and intensity of pain experienced can be used to direct care. This article also discusses possible consequences of undertreating pain and suggests pain management standards that can be used by clinicians to provide individualized, trauma-informed care and promote shared decision-making.

Historical Roots of Poor Pain Management

Normalization of pain and tolerance of poor pain management in obstetrics and gynecology is pervasive. From labor pain during childbirth to menstrual pain, the belief that pain should be accepted as part of women's health, health care, and life experiences is widespread, including in clinical examination rooms.^{1,2,3} In addition to sex-based inequity in pain assessment, racial biases also exist, placing many patients, particularly Black patients, at increased risk for their pain being undertreated.⁴ Dismissal of pain in obstetrics and gynecology is not a modern phenomenon and is deeply rooted in the **specialty's origins**. The field of gynecology was built through the assault on and exploitation of enslaved people, who underwent forced examinations and repetitive surgical experimentation without anesthesia.^{5,6}

Despite more recent efforts to eliminate health inequity and increase awareness of implicit and explicit bias, the subjective nature of pain assessment leaves patients vulnerable to clinician bias. Patients' pain during gynecologic procedures continues to be unidentified or undertreated by clinicians.^{7,8,9} In this brief review, we first describe how intensity and duration of pain can influence patients' overall experiences and the implications of unrecognized or undertreated pain. We then discuss standards of care for pain management during gynecologic procedures that should guide informed consent and shared decision-making, express clinicians' respect for patients' autonomy, and avoid harm by focusing on trauma-informed, patient-centered care.

Intensity and Duration of Pain

Pelvic examinations and procedures are commonly performed in ambulatory gynecology. These can last a few minutes, like collecting a Pap smear, to upwards of 30 minutes for

an operative hysteroscopy. Many procedures are performed under conditions of increased patient stress or worry, such as obtaining a biopsy to rule out cancer or completing a uterine aspiration procedure for an early pregnancy loss, which can lead to higher pain perception.^{10,11} Using **intrauterine device (IUD) placement** as an example, a recent study showed that nearly half (49.7%) of 1000 patients described pain with placement as intense (7-10 on a 10-point visual analog scale).^{12,13} However, even when clinicians recognize pain expressions, some clinicians underestimate the intensity and duration of pain patients experience during this procedure, putting patients at risk of having their pain poorly managed.^{7,8} For example, in a recent survey of patients after IUD placement, most reported they were not offered pain control options and 41.6% reported unacceptable pain experiences.¹⁴

In addition to underestimating pain experienced during gynecologic procedures, clinicians may focus on the relatively short duration of these procedures during the consent process, minimizing and normalizing moderate to severe pain as part of the procedure. By focusing on the short duration of the procedure, clinicians can easily ignore the importance of peak pain intensity. This phenomenon is known as the “peak and end rule,” which describes how our recall of emotional episodes focuses on the peak moments and the end of the experience rather than the overall duration.¹⁵ A related phenomenon, known as “duration neglect,” holds that the duration of an experience has minimal impact on the recollection of the experience.¹⁵ In effect, when we apply these ideas to clinic-based pain experiences, even when a procedure is short in duration, the intensity of peak pain and how peak pain ended will be the most important parts of an experience a patient recalls. By prioritizing duration over peak intensity, clinicians might harm patients by undertreating their pain. Clinicians should not withhold pain relief options based on a procedure’s anticipated short duration alone.

Implications

Failure to recognize and adequately address pain during gynecologic exams and procedures results in unnecessary physical and psychological harm to patients; engenders patients’ distrust of the medical community, directly compromising their autonomy; and can lead to patients’ avoidance of crucial medical care. False assurances of minimal pain to be expected with the procedure can not only lead to patients’ feelings of deception but compromise their autonomy and violate informed consent requirements. A recent study done by Wu et al explored the top 100 videos tagged “#IUD” on TikTok, which collectively had 471 million views and over 1 million shares.¹⁶ The authors found that 97% of the #IUD videos on patient experiences highlighted pain and 28% of videos mentioned distrust of clinicians. Many of the videos portray personal stories of negative experiences related to pain and informed consent. These negative experiences contribute to the growing mistrust of the medical community.¹⁷ Furthermore, negative experiences with previous exams or procedures can act as a barrier to care in the future, leading to delay or avoidance of important medical care.¹⁸ Clinicians’ underestimation and undertreatment of pain is in conflict with their obligation to do no harm, respect patient autonomy, and obtain full consent. Clinicians must strive to break down barriers to quality care rather than contribute to barriers their patients face.

Setting Standards

Trauma-informed approach. Individual experiences of gynecologic exams and procedures will vary from person to person, ranging from little or no pain to severe pain. While younger age, history of sexual abuse, and mental health disorders are all

associated with discomfort during pelvic exams, one of the strongest associations is a negative emotional contact between the patient and examiner.¹⁹ The importance of creating trust and rapport prior to sensitive exams or procedures cannot be overstated. A trauma-informed approach provides the foundation for this care. This approach does not assume universal trauma, but instead provides a framework for clinicians and health care organizations to develop a safe space for all patients. The key principles of trauma-informed care are described by the “4 R’s”: (1) realize “the widespread impact of trauma” and seek to understand “paths for recovery”; (2) recognize “the signs and symptoms of trauma”; (3) respond by “integrating knowledge about trauma into policies, procedures, and practices”; and (4) seek to prevent retraumatization.²⁰

Cultivation of trust involves listening to patients and seeking to understand their current or prior traumatic experiences that affect how pain is experienced during gynecologic exams and procedures. Before gynecologic exams or procedures, clinicians should ask patients about current or prior trauma, in line with the American College of Obstetricians and Gynecologists’ recommendation for universal screening for trauma.²¹ Although we know trauma is extremely common, not all patients will disclose their history. Through building rapport and using **open and supportive communication**, clinicians can create a safe physical and emotional environment for everyone.

Trauma-informed care focuses on patient-centered communication, which allows patients to regain control, reduce their anxiety, and ultimately build or rebuild their trust in clinicians. Trauma-informed care upholds the ethical principles of nonmaleficence and beneficence: to do no harm and also to promote the patient’s welfare. Because of the innate vulnerability associated with sensitive exams and procedures, clinicians must actively work to transfer power back to the patient. This transfer of power involves ensuring that the patient controls when the exam or procedure is to occur, obtaining permission to start the procedure, and reassuring the patient that the exam or procedure can stop at any time. These steps empower the patient to be actively involved in their care. In addition, clinicians and staff can work to create a safe environment in the exam room to avoid retraumatization. Actions as simple as knocking before entering the exam room, speaking to the patient first while they are fully clothed, having a chaperone and support person in the room, and avoiding triggering words can all help create a safe environment.

Person-centered care. Using a person-centered care model also supports patient autonomy and represents a shift from an antiquated medical paternalism approach. By focusing on the patient’s individual needs, preferences, and values, the clinician can embrace the diversity of care delivery and move away from a one size-fit-all approach. Clinicians should be careful not to express intentional or unintentional bias or to inject directed counseling into patient conversations, as they conflict with informed decision-making. Just as there are a wide range of patient experiences during gynecologic exams and procedures, so there are an equally wide range of approaches to alleviate pain. Patients should be offered all analgesia options. Through shared decision-making, the clinician and patient will come together to develop the pain management strategy using a holistic, individualized approach. The pain relief approach should be determined after a comprehensive informed consent, based on an honest discussion about the exam or procedure, anticipated pain, options to relieve pain, and available resources.

Clinicians should follow evidence-based practices for pain relief during gynecologic exams and procedures. While national guidelines do not exist in the United States,

evidence supports the use of oral analgesics as well as topical or local anesthetics as part of a multimodal approach for many ambulatory gynecologic procedures.^{22,23,24} Clinicians should be familiar with these different strategies and stay current with and open to new approaches to decrease pain. Although clinical context, such as low resource settings, may limit the ability to offer these resources, patients should not be denied pain management when necessary. Due to the complex innervation of the pelvic organs and structures, optimal pain relief for gynecologic procedures in the ambulatory setting is challenging. As pain experienced is dependent on multiple variables, including psychosocial and neurobiological factors, a multimodal approach is often most helpful. Taking into account patients' prior experiences and current psychological state is especially important in determining the pain relief approach. While not every patient will need moderate or deep sedation, certain populations, particularly patients with prior trauma, will benefit from higher levels of analgesia. When necessary and available, patients should be referred to an appropriate care team for the gynecologic exam or procedure to obtain the desired pain management that aligns with their values and preferences.

Conclusion

Pain during gynecologic exams continues to go unrecognized or to be poorly managed and undertreated. Standards of practice for pain management in gynecologic exams and procedures should prioritize patient comfort and well-being and be grounded in trauma-informed care. Despite the short nature of these procedures, we must stop normalizing inadequate pain control, which can lead to patient mistrust and retraumatization. Guiding standards for patient care during these sensitive exams and procedures are outlined in this review. By following these standards, we can build trust, provide patient-centered care, and create an environment that promotes a sense of safety. The field of gynecology must strive to evolve from its historical roots of exploitation to a patient-centered field guided by shared decision-making and trauma-informed care.

References

1. Samulowitz A, Gremyr I, Eriksson E, Hensing G. "Brave men" and "emotional women": a theory-guided literature review on gender bias in health care and gendered norms towards patients with chronic pain. *Pain Res Manag.* 2018;2018:6358624.
2. Hoffmann DE, Tarzian AJ. The girl who cried pain: a bias against women in the treatment of pain. *J Law Med Ethics.* 2001;29(1):13-27.
3. Hoffmann DE, Fillingim RB, Veasley C. The woman who cried pain: do sex-based disparities still exist in the experience and treatment of pain? *J Law Med Ethics.* 2022;50(3):519-541.
4. Hoffman KM, Trawalter S, Axt JR, Oliver MN. Racial bias in pain assessment and treatment recommendations, and false beliefs about biological differences between blacks and whites. *Proc Natl Acad Sci U S A.* 2016;113(16):4296-4301.
5. Ojanuga D. The medical ethics of the "father of gynaecology," Dr J Marion Sims. *J Med Ethics.* 1993;19(1):28-31.
6. Cronin M. Anarcha, Betsey, Lucy, and the women whose names were not recorded: the legacy of J Marion Sims. *Anaesth Intensive Care.* 2020;48(suppl 3):6-13.
7. Maguire K, Morrell K, Westhoff C, Davis A. Accuracy of providers' assessment of pain during intrauterine device insertion. *Contraception.* 2014;89(1):22-24.

8. Akintomide H, Brima N, Sewell RD, Stephenson JM. Patients' experiences and providers' observations on pain during intrauterine device insertion. *Eur J Contracept Reprod Health Care*. 2015;20(4):319-326.
9. Harrison R, Kuteesa W, Kapila A, et al. Pain-free day surgery? Evaluating pain and pain assessment during hysteroscopy. *Br J Anaesth*. 2020;125(6):e468-e470.
10. Ahmad AH, Zakaria R. Pain in times of stress. *Malays J Med Sci*. 2015;22(spec issue):52-61.
11. Padhy S, Fatima R, Jena S, Kar AK, Durga P, Neeradi VK. Effect of stress on contextual pain sensitivity in the preoperative period—a proof of concept study. *J Anaesthesiol Clin Pharmacol*. 2023;39(4):603-608.
12. Zhang L, Losin EAR, Ashar YK, Koban L, Wager TD. Gender biases in estimation of others' pain. *J Pain*. 2021;22(9):1048-1059.
13. Lopes-Garcia EA, Carmona EV, Monteiro I, Bahamondes L. Assessment of pain and ease of intrauterine device placement according to type of device, parity, and mode of delivery. *Eur J Contracept Reprod Health Care*. 2023;28(3):163-167.
14. Gero A, Elliott S, Baayd J, Cohen S, Simmons RG, Gawron LM. Factors associated with a negative Patient Acceptable Symptom State (PASS) response with intrauterine device placement: a retrospective survey of HER Salt Lake participants. *Contraception*. 2024;133:110385.
15. Fredrickson BL, Kahneman D. Duration neglect in retrospective evaluations of affective episodes. *J Pers Soc Psychol*. 1993;65(1):45-55.
16. Wu J, Trahair E, Happ M, Swartz J. TikTok, #IUD, and user experience with intrauterine devices reported on social media. *Obstet Gynecol*. 2023;141(1):215-217.
17. Huang EC, Pu C, Chou YJ, Huang N. Public trust in physicians—health care commodification as a possible deteriorating factor: cross-sectional analysis of 23 countries. *Inquiry*. 2018;55:46958018759174.
18. O'Laughlin DJ, Strelow B, Fellows N, et al. Addressing anxiety and fear during the female pelvic examination. *J Prim Care Community Health*. 2021;12:2150132721992195.
19. Hilden M, Sidenius K, Langhoff-Roos J, Wijma B, Schei B. Women's experiences of the gynecologic examination: factors associated with discomfort. *Acta Obstet Gynecol Scand*. 2003;82(11):1030-1036.
20. SAMHSA's Trauma and Justice Strategic Initiative. SAMHSA's concept of trauma and guidance for a trauma-informed approach. Substance Abuse and Mental Health Services Administration; 2014. Accessed July 19, 2024. <https://store.samhsa.gov/sites/default/files/sma14-4884.pdf>
21. Committee on Health Care for Underserved Women. Caring for patients who have experienced trauma: ACOG Committee opinion, number 825. *Obstet Gynecol*. 2021;137(4):e94-e99.
22. Charoenkwan K, Nantasupha C. Methods of pain control during endometrial biopsy: a systematic review and meta-analysis of randomized controlled trials. *J Obstet Gynaecol Res*. 2020;46(1):9-30.
23. Curtis KM, Nguyen AT, Tepper NK, et al. US selected practice recommendations for contraceptive use, 2024. *MMWR Recomm Rep*. 2024;73(3):1-77.
24. Ghamry NK, Samy A, Abdelhakim AM, et al. Evaluation and ranking of different interventions for pain relief during outpatient hysteroscopy: a systematic review and network meta-analysis. *J Obstet Gynaecol Res*. 2020;46(6):807-827.

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