



# Towards respectful obstetric care

## Hacia una atención obstétrica respetuosa

Agustina Campo<sup>1</sup> 

<sup>1</sup> Universidad Abierta Interamericana, Facultad de Medicina y Ciencias de la Salud, Carrera de Medicina. Buenos Aires, Argentina.

Submitted: 18-02-2024 | Revised: 21-04-2024 | Accepted: 25-05-2024 | Published: 26-05-2024

### ABSTRACT

Background: Episiotomy became widespread on the assumption that a controlled incision prevents severe spontaneous perineal injury. Evidence from randomized studies has challenged this rationale, although uncertainty remains in operative vaginal delivery. Objective: To critically synthesize evidence available through 31 December 2023 on the transition from routine to selective episiotomy, maternal and neonatal outcomes, operative delivery, and the Argentine context. Methods: A narrative synthesis was prepared from an archived multi-database literature retrieval, focusing on identifiable original trials, systematic reviews, guidelines, and Argentine research and policy. Bibliographic metadata and pivotal findings were cross-checked against journal, evidence-synthesis, or institutional sources. The automated screening output was not treated as a formally adjudicated systematic-review sample. Results: The 1993 Argentine randomized trial reported episiotomy in 30.1% of births under selective policy versus 82.6% under routine policy, with lower rates of several measures of posterior morbidity under selective practice. The 2017 Cochrane review found fewer severe perineal/vaginal injuries when unassisted birth was anticipated (risk ratio 0.70, 95% confidence interval 0.52–0.94; low-certainty evidence), but did not establish superiority for most long-term outcomes. Observational evidence suggests a possible protective association for correctly performed mediolateral/lateral episiotomy during operative delivery, especially in nulliparous women, but its certainty is very low. WHO guidance opposes routine or liberal episiotomy in spontaneous vaginal birth. Argentine research and national policy document a rationale for restrictive practice and informed participation without establishing a reliable, contemporary national episiotomy rate. Conclusions: Evidence through 2023 supports abandoning routine episiotomy in anticipated spontaneous vaginal birth. Selective decisions during operative delivery require individualized risk assessment, technique, clinical expertise, and informed consent. Additional rigorous studies and representative Argentine monitoring are needed.

Keywords: Episiotomy; Informed Consent; Vaginal Deliveries; Women's Autonomy; Humanised Care.

### RESUMEN

Antecedentes: La episiotomía se generalizó bajo el supuesto de que una incisión controlada previene los desgarros perineales graves. Los ensayos clínicos cuestionaron esa justificación, aunque persisten incertidumbres durante el parto vaginal instrumental. Objetivo: Sintetizar críticamente la evidencia publicada hasta el 31 de diciembre de 2023 sobre la transición de la episiotomía rutinaria a la selectiva, los resultados maternos y neonatales y la experiencia argentina. Métodos: Se elaboró una revisión narrativa a partir del archivo de búsqueda bibliográfica previamente recuperado y de la comprobación selectiva de ensayos, revisiones, recomendaciones y documentos argentinos. La selección automatizada no se consideró una muestra formal de revisión sistemática. Resultados: El ensayo argentino de 1993 registró episiotomía en el 30,1 % de los partos asignados a la política selectiva y en el 82,6 % de los asignados a la rutinaria. La revisión Cochrane de 2017 halló menor traumatismo perineal/vaginal grave cuando se anticipaba un parto no instrumental (riesgo relativo 0,70; intervalo de confianza del 95 %: 0,52–0,94; certeza baja), sin ventajas demostradas para la mayoría de los resultados tardíos. Los datos observacionales sobre la episiotomía mediolateral durante el parto instrumental sugieren una posible asociación protectora, aunque su certeza es muy baja. La OMS desaconseja la episiotomía rutinaria en el parto vaginal espontáneo. Conclusiones: La evidencia disponible hasta 2023 fundamenta evitar el uso sistemático y reservar la intervención para circunstancias individualizadas, con consentimiento informado. Se necesitan mejores estudios sobre el parto instrumental y datos representativos de la práctica argentina.

Palabras clave: episiotomía; parto vaginal; traumatismo perineal; parto instrumental; Argentina; consentimiento informado; revisión narrativa.

## INTRODUCTION

Episiotomy is a surgical incision in the perineum intended to enlarge the vaginal outlet during childbirth. Its historical diffusion was supported by assumptions that a planned incision would avert unpredictable severe tears, protect the pelvic floor, shorten a difficult birth, and prevent neonatal harm. These propositions proved attractive to obstetric services because they transformed perineal trauma into an apparently controllable procedure. However, an incision itself produces tissue injury that ordinarily requires repair; therefore, the relevant question is not whether perineal injury can ever be avoided but whether a policy of performing episiotomy routinely improves meaningful outcomes compared with selective use[1,2,4].

The distinction between policy and individual indication is essential. Evidence comparing hospitals or birth attendants instructed to perform episiotomy routinely with those instructed to use it selectively does not establish whether episiotomy is effective in every particular emergency. Likewise, the safety of selective practice during an anticipated spontaneous birth should not be mechanically extrapolated to forceps- or vacuum-assisted delivery, where background risk, incision geometry, and clinical urgency can differ[5,12,13].

This narrative review examines how the evidence available by 31 December 2023 affected those decisions. It considers the original randomized trials, later syntheses, outcomes relevant to women, potential indications in operative delivery, the recommendations of international organizations, and the particular contribution of Argentine trials, observational studies, policy and health-economic analysis[2,5-11].

## METHODS

A narrative, thematic approach was chosen because the research question concerns the historical development of clinical practice, comparative outcomes, health policy and patient experience, and because the evidence spans randomized trials, observational studies, economic analysis and authoritative guidance. The underlying research archive was generated in October 2026 using publication-year limits of 1980–2023. The recorded retrieval covered Scopus, Web of Science Core Collection, OpenAlex and Semantic Scholar; Crossref was attempted as a supplementary source but returned rate-limit errors. The archive does not document completed dedicated searches of PubMed, LILACS/BVS or SciELO, so no such search is claimed. Additional source checking for this manuscript used accessible journal, Cochrane, WHO and Argentine government or bibliographic records[5-11].

The automated archive reports 2,074 records at its title-and-abstract screening stage and retains 1,059 broad candidate records with machine-generated evidence fields. It also contains 196 locally downloaded PDFs and 195 Markdown conversions. These are processing statistics, not numbers of studies adjudicated for inclusion in a systematic review: some records were marginally relevant, included older versions of the same review, or had unverified machine-extracted interpretations. Pivotal sources were therefore selected on topical relevance and identifiable bibliographic records; numerical findings were checked against accessible trial abstracts, review findings, research articles or authoritative institutional texts. One Brazilian randomized study appeared in the archive in publications with matching sample sizes and outcomes and was not double-counted[14].

The thematic synthesis prioritized randomized comparative evidence for policies in anticipated spontaneous vaginal birth, separated observational findings on operative birth, distinguished risk reduction from absence of demonstrated benefit, and examined whether Argentine evidence supports claims about national implementation. No new meta-analysis, standardized risk-of-bias reassessment, comprehensive study count or PRISMA flow is reported. The literature cut-off applies to publication or issuance date rather than the date on which this manuscript was assembled.

## RESULTS

### From historical routine practice to comparative testing

The West Berkshire randomized perineal-management trial was an influential early test of the claim that more episiotomies necessarily lead to less serious trauma. In 1,000 women, the liberal-policy group had an episiotomy rate of approximately 51%, compared with 10% under a restrictive policy. The restrictive policy produced more minor anterior or labial trauma but a greater proportion of intact perineums; the trial did not demonstrate a broad maternal or neonatal advantage from

liberal use. Severe tears were few, making firm inference from that single outcome inappropriate[1].

A three-year follow-up from the same trial found no convincing evidence that liberal episiotomy prevented later urinary incontinence or dyspareunia. Long-term follow-up is informative but cannot overcome limits from response rates, subsequent childbirth and the age of the clinical techniques studied[3]. The importance of these studies lies in replacing theoretical expectations with comparative measurements, not in establishing that episiotomy can never be indicated.

The Argentine Episiotomy Trial Collaborative Group then conducted a randomized comparison involving 2,606 women in eight public maternity units, a pivotal contribution from Latin America. Episiotomy occurred in 30.1% of women allocated to the selective policy and 82.6% of those allocated to the routine policy, an absolute difference of 52.5 percentage points. Severe perineal trauma was uncommon in both groups (1.2% and 1.5%, respectively); anterior trauma was more frequent with selective practice, whereas posterior repair, perineal pain and healing complications were reduced. These findings undermined the practice of incision as a default action, while the low event frequency limited precision for rare severe injuries[2].

Later systematic reviews integrated these trials with additional evidence. A 2005 systematic review found no demonstrated maternal or neonatal benefit from routine episiotomy and emphasized weaknesses in the evidence on long-term pelvic-floor and sexual outcomes[4]. The updated 2017 Cochrane review included 12 studies with 6,177 participants overall, including 11 trials involving 5,977 women for whom a non-instrumental birth was anticipated, and one smaller study involving intended assisted birth. The distinction between these birth contexts determines how its principal conclusions should be interpreted[5].

### **Maternal and neonatal outcomes of selective versus routine policies**

The most relevant comparative result concerns severe perineal or vaginal trauma when unassisted birth was expected. Across eight randomized trials involving 5,375 women, the 2017 Cochrane synthesis reported a risk ratio of 0.70 (95% confidence interval 0.52–0.94) for selective compared with routine policy. A risk ratio of 0.70 corresponds to a relative reduction of 30% ( $1 - 0.70$ ), but the evidence was graded low certainty; the numerical reduction should therefore not be presented as a guaranteed benefit in every setting or parity group[5].

Trade-offs matter. When fewer surgical incisions are performed, anterior or labial tears may become more frequent. This observation does not make all tears equivalent: outcomes should be assessed by anatomic site, injury severity, repair burden, subsequent healing and women's symptoms. The Argentine trial and the earlier British trial both illustrate why a count of any perineal trauma, without distinguishing its type, is a potentially misleading primary outcome[1,2].

Evidence that a restrictive policy independently prevents hemorrhage, infection or persistent pain is substantially less secure. Cochrane judged the between-policy evidence for delivery blood loss and early moderate or severe perineal pain to be of very low certainty and found little or no clear difference in perineal infection. Observational work, including a multicenter Shanghai cohort, reported some favorable outcomes under selective institutional policy, but confounding by hospital type, parity, clinical practices and patient selection prevents those associations from replacing randomized conclusions[5,17].

Long-term outcomes deserve equally careful language. The 2017 Cochrane review did not establish an important difference in dyspareunia at six months or later and found no clear evidence of prevention of urinary incontinence by routine episiotomy. Other potentially serious outcomes, such as fistula and fecal incontinence, were missing or inadequately captured in the principal comparative trials. It would be incorrect to claim on these data alone that selective episiotomy eliminates later sexual dysfunction or all pelvic-floor disorders[3-5].

No clear neonatal advantage from a routine policy emerged in the Cochrane comparison of anticipated non-instrumental births. However, outcomes such as severe neonatal morbidity are infrequent and may not be adequately powered in studies designed primarily to assess maternal perineal injury. The negative finding must not be interpreted as proof that incision can never be useful when there is a compelling, documented need to expedite a difficult birth[5,6].

### **Why operative vaginal birth requires separate assessment**

Operative vaginal delivery changes the clinical question. Forceps and vacuum are associated with different patterns of traction, maternal tissue injury and indications for urgency. A mediolateral or lateral incision may plausibly alter the path of extension of trauma in selected cases; that possibility cannot be inferred from trials of a routine policy during anticipated spontaneous birth. The Cochrane review identified too little randomized evidence in planned operative birth to esta-

blish a generalized rule[5].

**Table 1. Selected evidence and its interpretation**

| Evidence                                        | Population or comparison                                     | Main reported finding                                                                                  | Interpretive caution                     |
|-------------------------------------------------|--------------------------------------------------------------|--------------------------------------------------------------------------------------------------------|------------------------------------------|
| Early policy comparison [1]                     | 1,000 women; liberal ~51% versus restrictive ~10% episiotomy | More intact perineums with restriction; rare severe tears and no broad neonatal benefit of liberal use | Single trial; rare events                |
| Argentine randomized trial [2]                  | 2,606 women; 30.1% versus 82.6% episiotomy                   | Less posterior repair and selected morbidity under selective policy; severe trauma 1.2% versus 1.5%    | Single trial; rare severe events         |
| 2017 Cochrane, anticipated unassisted birth [5] | Eight trials; 5,375 women for severe trauma outcome          | RR 0.70 (95% CI 0.52–0.94) selective versus routine severe perineal/vaginal trauma                     | Low certainty                            |
| 2017 Cochrane, longer-term outcomes [5]         | Different subsets and follow-up periods                      | No clear differences established for long-term dyspareunia or incontinence                             | Variable certainty; incomplete reporting |
| Operative delivery meta-analysis [12]           | 31 mainly observational studies; 703,977 births              | Mediolateral/lateral incision associated with lower OASI (OR 0.60; 95% CI 0.42–0.84)                   | Very low certainty; high heterogeneity   |
| Argentina provider-cost model [9]               | Santa Fe and Salta; historical modeled estimates             | Restrictive policy modeled savings of US\$20.21 and US\$11.63 per low-risk vaginal birth               | Not current national cost estimates      |

RR: risk ratio; OR: odds ratio; CI: confidence interval; OASI: obstetric anal sphincter injury. Original reports, not new pooled calculations.

A 2022 systematic review and meta-analysis of 31 studies and 703,977 operative vaginal births reported an association between mediolateral or lateral episiotomy and lower odds of obstetric anal sphincter injury (pooled odds ratio 0.60, 95% confidence interval 0.42–0.84). Subgroup analyses suggested an association in nulliparous women with vacuum or forceps births. Crucially, this largely observational evidence was rated very low certainty because of substantial heterogeneity and risk of bias, and sensitivity analyses restricted to studies at lower or moderate risk of bias did not demonstrate a statistically clear reduction. The pooled association must not be represented as proof of a causal protective effect[12].

A 2022 French propensity-score analysis likewise reported lower rates of anal sphincter injury in nulliparous operative deliveries receiving mediolateral episiotomy, but a propensity model can adjust only for measured confounding. Decisions about incision may reflect anatomy, fetal condition, clinician experience and urgency, some of which are incompletely recorded. The appropriate conclusion is that individualized operative-delivery decisions merit further randomized evaluation, not that the procedure should be performed automatically with every instrument[13].

Incision type and geometry are additional sources of heterogeneity. A 2012 case-control investigation associated characteristics of the healed episiotomy scar, including depth and position relative to the midline, with the odds of obstetric anal sphincter injury; however, post-delivery scar measurements and observational design prevent direct conversion of those associations into universally effective intraoperative thresholds. Technique should be considered in the context of local training, anatomy and evidence-based protocols rather than as a substitute for choosing whether the procedure is needed[15].

## Guidelines and a selective clinical approach

The World Health Organization's 2018 intrapartum-care guideline explicitly recommends against routine or liberal episiotomy for women undergoing spontaneous vaginal birth. The wording is deliberate: the evidence supports avoiding a routine policy without establishing a universal target percentage or proving that any individual incision is always necessary or always unnecessary. The guideline acknowledges insufficient evidence on episiotomy in obstetric emergencies and prioritizes respectful, woman-centered decision-making[6].

The 2018 American College of Obstetricians and Gynecologists guidance addresses prevention, diagnosis and repair of obstetric lacerations and recognizes that severe tears may entail persistent pelvic-floor, pain and sexual-function morbidity. It reinforces the need to evaluate perineal outcomes clinically, rather than use procedural frequency alone as a quality indicator[16]. A small Brazilian randomized trial comparing selective policy with a non-episiotomy protocol recorded

very low procedural rates in both groups and no clear outcome difference; it is useful as proof that low-use practice can be feasible in a studied setting, but it was not powered to rule out every rare indication[14].

In practice, selective use should mean that the clinician does not incise by habit or solely because a patient is nulliparous. When a specific concern arises, clinicians should weigh the anticipated benefit of incision against additional tissue injury, assess whether the birth is spontaneous or operative, document the indication, explain alternatives and obtain informed participation to the degree possible under the clinical circumstances. Training in accurate assessment of tears and appropriate repair remains important even in services with low episiotomy rates[6,10,11,16].

### **Argentina: trial evidence, policy and implementation limits**

Argentina supplied one of the seminal randomized comparisons and, consequently, offers more than a passive example of adopting external guidelines. The 1993 multicenter trial challenged routine mediolateral episiotomy in its own public-hospital context and provided data directly relevant to policy change[2]. Subsequent Argentine cost-effectiveness modeling used trial outcomes and local resource information from Santa Fe and Salta. From the provider perspective, the modeled restrictive-policy cost reduction was US\$20.21 per low-risk vaginal delivery in Santa Fe and US\$11.63 in Salta, in the original study's costing context. These are historical model-based estimates, not current national savings projections[9].

Practice, however, is not necessarily uniform after evidence becomes available. A retrospective study of 6,683 vaginal-delivery records from public maternity units in Neuquén found substantial inter-hospital variation and near-routine episiotomy among nulliparous women in the period investigated. Those observations demonstrate implementation variability in one province in 1996; they cannot be treated as measurements of Argentine practice in 2023[7]. Similarly, a multicountry Latin American hospital-based analysis published in 2002 helped document historically high episiotomy use in primiparous women but is not a current, nationally representative Argentine surveillance series[8].

National policy was aligned with restraint before the 2023 evidence cut-off. The Ministry of Health's normal-birth guide, adopted by Resolution 647/2003 and published in 2004, discussed the disadvantages of routine episiotomy and advocated carefully assessing necessity rather than making incision a default part of normal birth[10]. Argentina's Law 25.929 of 2004 further established rights to information about interventions, respectful and individualized care, and avoidance of invasive practices not justified by maternal or fetal health. The law does not itself measure compliance or specify a uniform clinical episiotomy indication[11].

The country-specific evidence in the reviewed sources therefore supports the existence of local trial evidence, early provincial implementation concerns, a health-economic rationale for restriction, and a rights-based normative framework. It does not support a precise Argentine national episiotomy rate as of 2023, a quantified national decline, or a claim that adherence is uniform across public and private institutions. Establishing those outcomes would require representative contemporary birth registries, standardized indication and injury definitions, and monitoring of informed-consent processes[2,7-11].

### **Consent, patient experience and outcome measurement**

Moving from routine to selective episiotomy also changes what should count as successful care. Procedural frequency is an incomplete metric unless paired with severe trauma, repair and healing, pain, sexual and continence outcomes, neonatal safety and women's experiences of being informed and respected. The Cochrane synthesis noted that participating trials did not adequately report women's views, despite addressing a procedure with direct bodily and experiential consequences[5].

Informed consent is especially relevant because the clinical indication often arises late in labor, when communication must be concise and responsive. Argentine law and WHO recommendations provide compatible frameworks for explaining why an intervention is proposed, avoiding non-indicated procedures and documenting the decision. The presence of clinical urgency does not justify portraying routine episiotomy as harmless or consent as unnecessary; teams should prepare antenatal information and practice communication suited to the circumstances of childbirth[6,11].

Future research should report outcomes meaningful to patients at prespecified time points, distinguish spontaneous tears from episiotomy extensions and use standardized criteria for third- and fourth-degree injury. Where possible, operative-delivery studies should stratify by parity, instrument, precise incision type, indication, geometry and clinician experience. In Argentina, regional

comparisons additionally need consistent data on facility type, patient characteristics, perineal injury ascertainment and the experience of informed participation[5,12,15].

### **Strengths, limitations and future priorities**

The principal strength of this synthesis is the combination of high-relevance randomized trials, the updated Cochrane appraisal, pre-2024 international guidance, and independently identifiable Argentine research and legislation. Its scope deliberately distinguishes anticipated spontaneous birth from operative delivery and separates clinical, experiential and health-policy outcomes.

This is not a systematic review. The underlying automated retrieval and extraction archive included numerous broadly relevant and potentially duplicated records; its 1,059 candidates should not be interpreted as 1,059 qualified studies. The present manuscript did not individually validate every automated extraction or undertake de novo meta-analysis. Some pivotal studies were checked from published abstracts and evidence syntheses rather than every full-text article, and some policy or patient-experience sources are descriptive. Database coverage is incomplete for specialized Latin American indexes, and non-representative older Argentine observations cannot answer current prevalence questions. These limitations constrain completeness, not the directly verifiable comparisons reported from the major sources[2,5,6,10-13].

Priority questions are whether defined subgroups of operative vaginal birth benefit causally from a particular episiotomy policy; which techniques minimize clinically important injury when an incision is chosen; which long-term and patient-reported outcomes are affected; and whether implementation programs can reduce unnecessary incision without shifting risk toward under-diagnosed anal sphincter injury. Prospective multicenter Argentine monitoring and transparent birth-registry definitions could connect evidence-based policy with real-world practice.

### **CONCLUSION**

The historical rationale for performing episiotomy routinely in anticipated spontaneous vaginal birth had not withstood comparative testing. The strongest synthesis found less severe perineal/vaginal trauma under selective policy, while benefits of routine use for long-term maternal or neonatal outcomes remained unproven. Operative vaginal delivery is a different clinical setting: observational evidence suggests that appropriately performed mediolateral or lateral incisions may protect selected women, but the low certainty of these associations precludes a universal policy. Argentina's randomized trial, national guidance and rights framework provide a locally grounded rationale for individualized decisions. Future care and research should prioritize clinically meaningful outcomes, accurate injury assessment, communication and consent, and reliable monitoring rather than a fixed procedural target.

## REFERENCES

1. Sleep J, Grant A, Garcia J, Elbourne D, Spencer J, Chalmers I. West Berkshire perineal management trial. *BMJ*. 1984;289:587–590. <https://doi.org/10.1136/bmj.289.6445.587>
2. Argentine Episiotomy Trial Collaborative Group. Routine vs selective episiotomy: a randomised controlled trial. *Lancet*. 1993;342(8886–8887):1517–1518. [https://doi.org/10.1016/S0140-6736\(05\)80085-6](https://doi.org/10.1016/S0140-6736(05)80085-6)
3. Sleep J, Grant A. West Berkshire perineal management trial: three year follow up. *BMJ*. 1987;295:749–751. <https://doi.org/10.1136/bmj.295.6601.749>
4. Hartmann K, Viswanathan M, Palmieri R, Gartlehner G, Thorp J, Lohr KN. Outcomes of routine episiotomy: a systematic review. *JAMA*. 2005;293(17):2141–2148. <https://doi.org/10.1001/jama.293.17.2141>
5. Jiang H, Qian X, Carroli G, Garner P. Selective versus routine use of episiotomy for vaginal birth. *Cochrane Database Syst Rev*. 2017;2:CD000081. <https://doi.org/10.1002/14651858.CD000081.pub3>
6. World Health Organization. WHO recommendations: intrapartum care for a positive childbirth experience. Geneva: WHO; 2018. ISBN: 978-92-4-155021-5. <https://www.who.int/publications/i/item/9789241550215>
7. Cravchik S, Muñoz DM, Bortman M. Indicaciones de episiotomía en maternidades públicas de Neuquén, Argentina. *Rev Panam Salud Publica*. 1998;4(1):26–31. <https://doi.org/10.1590/S1020-49891998000700005>
8. Althabe F, Belizán JM, Bergel E. Episiotomy rates in primiparous women in Latin America: hospital based descriptive study. *BMJ*. 2002;324(7343):945–946. <https://doi.org/10.1136/bmj.324.7343.945>
9. Borghi J, Fox-Rushby J, Bergel E, Abalos E, Hutton G, Carroli G. The cost-effectiveness of routine versus restrictive episiotomy in Argentina. *Am J Obstet Gynecol*. 2002;186(2):221–228. <https://doi.org/10.1067/mob.2002.119632>
10. Ministerio de Salud de la Nación Argentina. Resolución 647/2003: Guía para la atención del parto normal, capítulo 2. Sancionada el 5 de diciembre de 2003; publicada el 15 de enero de 2004. <https://www.argentina.gob.ar/normativa/recurso/91868/res647-2004-cap2/htm>
11. República Argentina. Ley 25.929: Protección del embarazo y del recién nacido. Sancionada el 25 de agosto de 2004; publicada el 21 de septiembre de 2004. <https://www.argentina.gob.ar/normativa/nacional/ley-25929-98805/texto>
12. Okeahialam NA, Wong KW, Jha S, Sultan AH, Thakar R. Mediolateral/lateral episiotomy with operative vaginal delivery and the risk reduction of obstetric anal sphincter injury (OASI): a systematic review and meta-analysis. *Int Urogynecol J*. 2022;33:1393–1405. <https://doi.org/10.1007/s00192-022-05145-1>
13. Desplanches T, Marchand-Martin L, Szczepanski ED, et al. Mediolateral episiotomy and risk of obstetric anal sphincter injuries and adverse neonatal outcomes during operative vaginal delivery in nulliparous women: a propensity-score analysis. *BMC Pregnancy Childbirth*. 2022;22:48. <https://doi.org/10.1186/s12884-022-04396-6>
14. Melo I, Katz L, Coutinho I, Amorim MM. Selective episiotomy vs. implementation of a non-episiotomy protocol: a randomized clinical trial. *Reprod Health*. 2014;11:66. <https://doi.org/10.1186/1742-4755-11-66>
15. Stedenfeldt M, Pirhonen J, Blix E, Wilsgaard T, Vonen B, Øian P. Episiotomy characteristics and risks for obstetric anal sphincter injuries: a case-control study. *BJOG*. 2012;119(6):724–730. <https://doi.org/10.1111/j.1471-0528.2012.03293.x>
16. American College of Obstetricians and Gynecologists. Prevention and management of obstetric lacerations at vaginal delivery. ACOG Practice Bulletin No. 198. *Obstet Gynecol*. 2018;132(3):e87–e102. DOI: 10.1097/AOG.0000000000002841. <https://www.acog.org/clinical/clinical-guidance/practice-bulletin/articles/2018/09/prevention-and-management-of-obstetric-lacerations-at-vaginal-delivery>
17. Gu S, Pei J, Zhou C, et al. Selective versus routine use of episiotomy for vaginal births in Shanghai hospitals, China: a comparison of policies. *BMC Pregnancy Childbirth*. 2022;22:475. <https://doi.org/10.1186/s12884-022-04790-0>

## FUNDING

None.

## CONFLICT OF INTEREST

None.

## AUTHORSHIP CONTRIBUTIONS

Conceptualisation: Agustina Campo.  
Data curation: Agustina Campo.  
Formal analysis: Agustina Campo.  
Research: Agustina Campo.  
Methodology: Agustina Campo.  
Project management: Agustina Campo.  
Software: Agustina Campo.  
Supervision: Agustina Campo.  
Validation: Agustina Campo.  
Visualisation: Agustina Campo.  
Writing - original draft: Agustina Campo.  
Writing - proofreading and editing: Agustina Campo.