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Letter to the Editor

Between hope and hesitation: Evaluating sterile water injections as an obstetric pain relief strategy in sub-saharan Africa.

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MAIN TEXT

Dear Editor-in-chief,

A recent update from the National Institute for Health and Care Excellence (NICE) guidelines in the UK regarding the adoption of sterile water as a potential analgesic during labour has hit the world of anaesthetic and obstetric practice with surprise, sprouting divergent conversations about its use in labour.[1] Labour is often accompanied by the most severe pain most women will ever experience in their lifetimes[2] and analgesic agents in labour are well documented with varying degrees of efficacy for pain management.[3-8]

Sterile water injections have been found to be effective in relieving pain during labour, particularly low back pain.[9] Multiple research studies have shown that injections of sterile water can provide significant pain relief with good maternal satisfaction[10 - 12] and are an effective and low-cost alternative for pain relief during labour, particularly in settings with limited pain relief options.[9] The injections are typically administered either intracutaneously or subcutaneously, with most studies reporting good pain relief for up to two hours.[13] The number of injections and the amount of sterile water used can vary, but the recommendation is generally to give four injections.[11]

It is worth noting that there is a lack of knowledge among obstetricians and midwives about the use of sterile water injections for pain relief during labour, and many are interested in learning more about their use.[10] While the underpinnings of its efficacy remain enigmatic, and large-scale cohort studies have been conspicuously controversial with considerable stakeholders citing the pharmacological emptiness,[14] there exists a promising avenue of research exploration regarding its application, especially in the context of rural Sub-Saharan Africa.

Sub-Saharan Africa, characterised by diverse health challenges, is emblematic of settings where simplified, cost-effective interventions can profoundly influence maternal outcomes. The region grapples with limited access to sophisticated pain management techniques during labour, thereby exacerbating the physical and psychological ordeal associated with childbirth.

In the milieu of this backdrop, the potential advantages of sterile water analgesia become particularly salient:

Economic Viability: As sterile water is inexpensive and readily accessible, it can be integrated seamlessly into existing healthcare frameworks without imposing undue financial strain.

Ease of Administration: Given parenteral administration (either intracutaneously or subcutaneously), the technique could be easily taught to community health workers, expanding the reach of pain relief even in the most remote hamlets.

Safety Profile: Preliminary findings suggest a favourable safety profile, making it an attractive option in settings where constant monitoring might be a luxury.

However, as we weigh these benefits, it is paramount to approach this potential paradigm shift with a modicum of caution:

Mechanism of Action: The nebulous understanding of its analgesic mechanism necessitates thorough investigation. Without this foundational knowledge, we risk unforeseen complications.

Cultural Acceptance: Cultural nuances shape

medical practices and their acceptability. Ethnographic research would be indispensable to understand how sterile water injections would be perceived in diverse Sub-Saharan communities.

Efficacy in Long-Term: The longevity of its pain-relieving effects, especially in protracted labours, remains to be seen as evidenced by concerns courted by anaesthetists who query the pharmacological mechanism every now and then.

In conclusion, while sterile water might appear promising in the quest for affordable and accessible labour analgesia, it is incumbent upon the research community to undertake rigorous, contextually relevant studies. Sub-Saharan Africa, with its unique challenges and undeniable resilience, could potentially benefit immensely from this intervention. However, it is only with evidence-based conviction that we can chart a course towards reducing maternal discomfort, one injection at a time.

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