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**Relief of Postpartum Perineal Pain in a Low Resource Setting: Comparison of the Efficacy of Oral Paracetamol Versus Oral Diclofenac**

Adekunle Adebayo, Aworinde Olufemi\*, Fijabiyi Matthew, Adeniran Muibat, Owonikoko Kola, Adeyemi Adewale

Department of Obstetrics and Gynaecology, Ladoke Akintola University of Technology, Ogbomoso, Oyo state, Nigeria.

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**Objectives:** Comparison of paracetamol and diclofenac in management of perineal pain after vaginal delivery. **Methodology:** Participants were randomized into diclofenac (50mg 12 hourly) or paracetamol (1000mg 8 hourly) group. Baseline pain at 2 hours then12, 24, 36 and 48 hours after delivery or at discharge were assessed. Perineal pain relief, the need for additional analgesic and maternal or neonatal drug adverse effect were noted. Analysis was done using SPSS version 22. **Results:** Respondents in the diclofenac group had a lower pain score than the paracetamol group at the 24-, 36- and 48-hour interview (p= 0.003, <0.001 and <0.001). The level of maternal satisfaction was higher in the diclofenac group (p= 0.004). There was no obvious maternal or neonatal side effect seen in either group. **Conclusion:** Oral diclofenac is more effective in the relief of perineal pain following vaginal child birth than oral paracetamol.

**Keywords:** perineal pain, postpartum analgesia, diclofenac, paracetamol, relief

\*Corresponding author:

Aworinde Olufemi

Email: ooaworinde23@lautech.edu.ng

**Introduction**

The birth of a baby is a joyous occasion for a woman and her family, but postpartum perineal pain sometimes interferes with this special time in a woman’s life. Perineal pain is a common, but poorly studied adverse outcome following childbirth. Pain may result from bruising of the perineum during vaginal delivery, perineal tear, episiotomy or instrumental vaginal delivery.1, 2

Perineal trauma and the resultant perineal pain after giving birth typically presents in the immediate post-partum period. On the first post-partum day, perineal pain has been reported in ≥95% of women with episiotomies and perineal tears, and 75% of women who gave birth with an intact perineum. At one week postpartum this reduced to 60-71% in the episiotomy and perineal tear group and 38% of women with intact perineum.2 This initial or immediate post-partum pain can be really intense and can interfere with the woman’s ability to care for her baby and establishment of breast feeding due to discomfort.1 There is also associated factors of decreased mobility, urinary or faecal incontinence and dyspareunia which may result in maritaldisharmony.3,4,5 Perineal pain resulting from vaginal delivery persists in 10-32% of women for up to 18 months.6, 7

Most accouchers place premium on analgesia in labour and neglect postpartum pain management. A pain-free or at least a pain-reduced post-partum period is fundamental to achieving safe motherhood and exclusive breastfeeding. The effect of perineal pain on mothers’ functionality to her husband and child and general health cannot be over emphasized. The identification of perineal pain and methods used for its relief are considered important to minimize it, thus offering women the possibility to experience motherhood in a positive and pleasant way. Various measures are however targeted at reducing the rate of perineal trauma in order to reduce the incidence of perineal pain and the need for adequate analgesia will continue to be imperative, hence the need for this study. 4,5

Various pharmacologically active preparations are available orally to relieve perineal pain; most randomized trials show that these active preparations are superior to placebo8,9 but fail to distinguish clinically important differences between the analgesics. Secondly, most of the drugs included in the trials are no longer commercially available. Paracetamol and diclofenac on the other hand are readily available over-the-counter, cheap, effective and well tolerated.1

This study aimed to evaluate and compare the effectiveness of 1000mg of oral paracetamol versus oral diclofenac for relieving perineal pain following vaginal childbirth. The primary outcome measures included adequate perineal pain relief, the need for additional analgesic and obvious maternal or neonatal drug adverse effect. Secondary outcome measures were time to initiation of breast feeding, time to ambulation and maternal satisfaction.

**Materials and Methods**

The study was an interventional randomized clinical trial carried out among consenting women who had vaginal delivery at the delivery suite of LAUTECH Teaching Hospital Ogbomoso, Oyo state, Southwestern Nigeria. The null hypothesis was that there is no statistically significant difference in perineal pain relief among women who had paracetamol compared with women who had diclofenac for post-partum analgesia following vaginal delivery.

Sample size was determined based on the formula for estimating sample size for the comparison of two independent population as described by Armitage et al.10. Taking the prevalence in the 2 comparison groups to be 55% and 75% with a power of 90%.1 In order to make allowance for attrition, 10% of the estimated sample size was added making 226 patients in each group.

Exclusion criteriawas women with contraindications to NSAIDS’ use like history of peptic ulcer disease or bleeding disorders, significant renal or liver impairment, asthma and women on anticoagulants.Approval for the study was obtained from the ethical committee of the hospital with protocol number LTH/OGB/EC/2021/14.

Consenting participants were randomized into diclofenac or paracetamol groups using simple random sampling. 50mg of diclofenac potassium tablets (Cataflam® by Novartis pharmaceuticals) was administered 12hourly while 1000mg of paracetamol tablets (Panadol® by GlaxoSmithKline plc) was administered 8hourly after meal. The need for an additional analgesia was assessed 6hours after the initial drug had been given; if indicated, oral tramadol (Tramal® manufactured by Searle) 50mg was then administered. This extra analgesic agent, was controlled for during analysis of the results.

The instrument of survey was a proforma with subsections consisting of: sociodemographic data, Antenatal history, Labor and Delivery, Baseline pain evaluation, Evaluation of pain and relief 12hours, 24hours, 36hours and 48hours post-delivery, Evaluation of need for extra analgesia, Evaluation of possible side effect of drugs, Onset and ease of breastfeeding, Maternal satisfaction, Evaluation of onset of ambulation

After patients had been cleaned up post vaginal delivery the respondents were randomized and placed either in the diclofenac or paracetamol group. Baseline evaluation was done2 hours after delivery by interview method; the test drug was then administered. Patient was subsequently interviewed at 12 hours,24 hours, 36 hours,48 hours, or discharge. The drug was administered as per study protocol.

The baseline pain intensity within 2 hours post-delivery and at each of 12 hours, 24 hours, 36 hours, 48 hours, or discharge was assessed using a 11-point numeric pain intensity scale with zero indicating no pain and 10 the worst pain possible. For the extent of pain relief, the difference between two consecutive pain intensity measurements was calculated. The resultant pain intensity difference at each time was summed to give one numerical value, the Summed Pain Intensity Difference (SPID), for each respondent. The higher the SPID the greater is the pain relief. Maternal satisfaction about pain relief was assessed using Pain Relief Satisfaction Scale.

The data was analysed using statistical package SPSS 22; initial frequency tables and chart was generated for univariate analysis and cross tabulation for bivariate analysis using chi square to test if there is association. Any significant association was subjected to multivariate analysis. Level of significance was set at p value ≤0.05

**Results**

Table 1 shows maternal demographic distribution within the two study groups. The mean age of patients that used diclofenac was 28.81 ± 5.95 years. Although this was marginally lower than the value for the PCM

Table 1: Socio-Demographic Profile of Respondents

Interventional group (%) Chi

Variable PCM Diclofenac Total square Df p-value

n=226 n=226 N=452 x2

Age

*Mean Age* 29.55+5.69 28.81+5.95 1.366\* 450 0.173

Less than 20 years 12(5.3%) 21(9.3%) 33(7.3%) 7.503 3 0.057

20 – 29 years 105(46.5%) 102(45.1%) 207(45.8%)

30 – 39 years 104(46.0%) 103(45.6%) 207(45.8%)

40 years and above 5(2.2%) 0(0.0%) 5(1.1%)

Tribe

Yoruba 220(97.3%) 208(92.0%) 428(94.7%) 6.336 1 0.012

Igbo 6(2.7%) 18(8.0%) 24(5.3%)

Occupation

Unemployed 47(20.8%) 42(18.6%) 89(19.7%) 2.299 2 0.317

Unskilled labour 138(61.1%) 130(57.5%) 268(59.3%)

Skilled labour/ 41(18.1%) 54(23.9%) 95(21.0%)

Professionals

Husband Occupation

Unemployed 16(7.1%) 9(4.0%) 25(5.5%)

Unskilled labour 118(52.2%) 115(50.9%) 233951.5%) 2.710 3 0.438

Skilled labour 83(36.7%) 90(39.8%) 173(38.3%)

Professionals 9(4.0%) 12(5.3%) 21(4.6%)

Level of Education

Primary 41(18.1%) 39(17.3%) 80(17.7%) 6.613 3 0.085

Secondary 84(37.2%) 91(40.3%) 175(38.7%)

Tertiary 83(36.7%) 90(39.8%) 173(38.35%)

No formal

Education 18(8.0%) 6(2.7%) 24(5.3%)

\*T-test for two independent sample was used

(29.55± 5.69 years), this difference was not statistically significant (t= 1.366, df=450; p=0.173). The distribution of respondents according to tribes is significantly different between the PCM and diclofenac interventional groups. There was no significant difference between the two interventional groups by age, occupation, level of education of the patient and husband’s occupation. Table 2 shows the obstetric parameters of respondents with their interventional group. The largest proportion of patients in each of the interventional group (69.9% PCM and 64.6% diclofenac) were multipara, However, there was no statistically significant difference in the proportions of patients that used PCM and diclofenac in the parity (x2 = 4.433, df = 2; p = 0.109). similarly, gestational age at booking in the two interventional groups was not significantly different statically (p = 0.979) shows the distribution of patient’s labour history within the interventional groups.

Although slightly higher proportion (68.6%) of patients in paracetamol interventional group had duration less than 12 hours compared 62.8% in diclofenac group, this difference is not statistically significant (p=0.198). Also, the difference in proportion of patient that had induction/augmentation of labour in the two interventional groups s statically insignificant (p=0.517). About 23.9% (54) of patients used analgesia during labour in paracetamol group, but only 16.8% (38) of patients in diclofenac used analgesia during labour. However, the difference in the proportion of patients in each interventional group is statistically insignificant (p = 0.062).

Sixty-six (29.2%) in diclofenac group had episiotomy during labour compared with 24.8% (56) in the paracetamol group but this difference was not statistically significant. (x2 = 0.527, df = 1; p = 0.289). Likewise, 30.5% in PCM group had second degree

Table 2: Obstetric parameters of respondents.

Interventional group (%) Chi

Variable PCM Diclofenac Total square Df p-value

n=226 n=226 N=452 x2

Parity

Primipara 42(18.6%) 60(26.5%) 102(22.6%) 4.433 2 0.109

Multipara 158(69.9% 146(64.6%) 304(67.3%)

Grandmultipara 26(11.5%) 20(8.8%) 46(10.2%)

Gestational Age at

Booking

First trimester 37(16.4%) 38(16.8%) 75(16.6%) 0.044 2 0.978

Second trimester 111(49.1%) 112(50.2%) 223(49.3%)

Third trimester 78(34.5%) 76(33.6%) 154(34.1%)

Duration of labour

Less than 12 hours 155(68.6%) 142(62.8%) 297(65.7%) 1.659 1 0.198

12 hours or more 71(31.4%) 84(37.2%) 155(34.3%)

Induction/

Augmentation of Labour

Yes 99(43.8%) 105(46.5%) 204(45.1%) 6.336 1 0.012

No 127(56.2%) 121(53.5%) 248(54.9%)

Analgesia during labour

Yes 54(24.0%) 38(16.8%) 92(20.4%) 3.494 1 0.062

No 172(76.1%) 188(83.2%) 360(79.6%)

Table 3: Pain Score Evaluation within the Study Groups.

Interventional group (%) Chi

Variable PCM Diclofenac Total square Df p-value

n=226 n=226 N=452 x2

Baseline

No Pain 7(3.1%) 10(4.4%) 17(3.8%) 2.300 3 0.513

Mild Pain 78(34.5%) 87(38.5%) 165(36.5%)

Moderate Pain 88(38.9%) 87(38.5%) 175(38.7%)

Severe Pain 53(23.5%) 42(18.6%) 95(21.0%)

12hours post delivery

No pain 48(21.2%) 37(16.4%) 85(18.8%) 2.479 3 0.479

Mild pain 115(50.9%) 130(57.5%) 245(54.2%)

Moderate pain 52(23.0%) 49(21.7%) 101(22.3%)

Severe pain 11(4.9%) 10(4.4%) 21(4.6%)

24hours post delivery

No pain 85(37.6%) 90(39.8%) 175(38.7%) 13.886 3 0.003

Mild pain 117(51.8%) 124(54.9%) 241(53.3%)

Moderate pain 23(10.2%) 6(2.7%) 29(6.4%)

Severe pain 1(0.4%) 6(2.7%) 7(1.5%)

36hours post delivery

No pain 130(57.5%) 180(79.6%) 310(68.6%) 25.670 1 < 0.001

Mild pain 96(42.5%) 46(20.4%) 142(31.4%)

48hours post deliver

No pain 185(81.9%) 212(93.8%) 397(87.8%) 15.091 1 < 0.001

Mild pain 41(18.1%) 14(6.2%) 55(12.2%)

Table 4. Relief Evaluation Within the Study Groups

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Interventional group (% | | | | | | |
| Variable | PCM  n=226 | Diclofenac  n=226 | Total  N=452 | C hi Square | DF | P-Value |
| 12hours post delivery | | | | | | |
| No Pain | 1(0.4%) | 0(0.0%) | 1(0.2%) | 13.458 | 3 | 0.004 |
| Mild Pain | 2(0.9%) | 17(7.5%) | 19(4.2%) |  |  |  |
| Moderate Pain | 57(25.2%) | 57(25.2%) | 114(25.2%) |  |  |  |
| Severe Pain | 166(73.5%) | 152(67.3%) | 318(70.4%) |  |  |  |
| 24hours post delivery | | | | | | |
| Mild Relief | 14(6.2%) | 7(3.1%) | 21(4.6%) | 2.455 | 2 | 0.029 |
| Moderate Relief | 14(6.2%) | 14(6.2%) | 28(6.2%) |  |  |  |
| Significant Relief | 198(87.6%) | 205(90.7%) | 403(89.2%) |  |  |  |
| 36 hours post delivery | | | | | | |
| Mild Relief | 2(5.3%) | 3(1.3%) | 15(3.3%) | 15.402 | 2 | < 0.001 |
| Moderate Relief | 0(0.0%) | 10(4.4%) | 10(2.2%) |  |  |  |
| Significant Relief | 214(94.7%) | 213(94.2%) | 427(94.5%) |  |  |  |
| 48 hours post delivery | | | | | | |
| Mild Relief | 6(2.7%) | 0(0.0%) | 6(1.3%) | 12.000 | 2 | 0.002 |
| Moderate Relief | 0(0.0%) | 6(2.7%) | 6(1.3%) |  |  |  |
| Significant Relief | 220(97.3%) | 220(97.3%) | 440(97.3%) |  |  |  |

Table 5. Use of Analgesics During Labour Among Respondents in the Study Groups

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Interventional group (% | | | | | | |
| Variable | PCM  n=226 | Diclofenac  n=226 | Total  N=452 | C hi Square | DF | P-Value |
| 2 hours post delivery | | | | | | |
| Mild Pain | 5(9.3%) | 22(57.9%) | 27(29.3%) | 29.411 | 2 | <0.001 |
| Moderate Pain | 34(63.0%) | 6(15.8%) | 40(43.5%) |  |  |  |
| Severe Pain | 15(27.8%) | 10(26.3%) | 25(27.2%) |  |  |  |
| 12 hours post delivery | | | | | | |
| No Pain | 9(16.7%) | 6(15.8%) | 15(16.3%) | 7.835 | 3 |  |
| Mild Pain | 39(72.2%) | 20(52.6%) | 59(64.1%) |  |  |  |
| Moderate Pain | 5(9.3%) | 6(15.8%) | 11(12.0%) |  |  |  |
| Significant Pain | 1(1.9%) | 6(15.8%) | 7(7.6%) |  |  |  |
| 2 hours post delivery | | | | | | |
| No Pain | 7(4.1%) | 10(5.3%) | 17(4.7%) | 6.209 | 3 | 0.0121 |
| Mild Pain | 73(42.4%) | 65(34.6%) | 138(38.3%) |  |  |  |
| Moderate Pain | 54(31.4%) | 81(43.1%) | 135(37.5%) |  |  |  |
| Severe Pain | 38(22.1%) | 32(17.0%) | 70(19.4%) |  |  |  |
| 12 hours post delivery | | | | | | |
| No Pain | 39(22.7%) | 31(16.5%) | 70(19.4%) | 9.186 | 3 | 0.027 |
| Mild Pain | 76(44.2%) | 110(58.5%) | 186(51.7%) |  |  |  |
| Moderate Pain | 47(27.3%) | 43(22.9%) | 90(25.0%) |  |  |  |
| Severe Pain | 10(5.8%) | 4(2.1%) | 14(3.9%) |  |  |  |

Patient used Analgesia during labour (n=92)

Patient did not use Analgesia during labour (n=360)

Table 6. Postpartum Events and Level of Satisfaction od respondents

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Interventional group (% | | | | | | |
| Variable | PCM  n=226 | Diclofenac  n=226 | Total  N=452 | C hi Square  X2 | DF | P-Value |
| Need for additional analgesia | | | | | | |
| Yes | 3(1.3%) | 1(0.4%) | 4(0.9%) | 1.009 | 1 | 0.315 |
| No | 223(98.7%) | 225(99.6%) | 448(99.1%) |  |  |  |
| Reason for additional analgesia | | | | | | |
| Exploration for removal  of retained products | 0(0.0%) | 1(100.0%) | 1(25.0%) | 4.000 | 1 | 0.046 |
| No Relief | 3(100.0%) | 0(0.0%) | 3(75.0%) |  |  |  |
| Time of Ambulation | | | | | | |
| < 1 hour | 168(74.3%) | 189(83.6%) | 357(79.0%) | 5.885 | 2 | 0.053 |
| 1 – 2 hours | 49(21.7%) | 31(13.7%) | 80(17.7%) | 15.402 | 2 | < |
| > 2 hours | 9(4.0%) | 6(2.7%) | 15(3.3%) |  |  |  |
| Commencement of breast feeding | | | | | | |
| Yes | 221(97.8%) | 224(99.1%) | 445(98.5%) | 1.306 | 1 | 0.253 |
| No | 5(2.2%) | 2(0.9%) | 7(1.5%) |  |  |  |
| If yes, when did you commence breast feeding | | | | | | |
| < 1 hour after delivery | 159(71.9%) | 178(75.5%) | 337(75.7%) | 3.422 | 1 | 0.064 |
| > 1 hour after delivery | 62(28.1%) | 46(20.5%) | 108(24.3%) |  |  |  |
| Level of satisfaction | | | | | | |
| Some satisfaction | 17(7.5%) | 6(2.7%) | 23(5.1%) | 11.128 | 2 | 0.004\* |
| Significant Satisfaction | 149(65.9%) | 133(58.8%) | 282(62.4%) |  |  |  |
| Maximum Satisfaction | 60(26.1%) | 87(38.5%) | 147(32.5%) |  |  |  |

perineal tears during labour compared with 27.40% in the diclofenac group but this difference is not statistically significant. (x2 = 0.527; df = 1; p = 0.468).

Table 3 shows pain scores of the patients within the study groups. There was statistically significant difference (p value < 0. 05) between the two study groups (diclofenac and paracetamol) for pain evaluation at 24 hours post-delivery, 36hours post-delivery and 48hours post-delivery. Significantly fewer women 6.2% (14) in diclofenac group described their pain as mild at 48hours post-delivery compared with 18.1% (41) women in paracetamol group. There were statistically, insignificant differences between the two groups in their base line pain assessment (2hours post-delivery) and at 12hours post-delivery (p value >0.05).

Table 4 shows relief evaluation of the patients with interventional groups. There is statistically significant difference (p value <0.05) between the two

interventional groups (diclofenac and paracetamol) in their relief evaluation.

Table 5 shows the pain score within study groups among respondents and the use of analgesia during labour. Unlike with the total respondents, the difference in the baseline pain assessment in the patients that used analgesia during labour was statistically significant.

Table 6 shows satisfactory scale and intervention groups. Higher proportion (38.5%) in the diclofenac group derived maximum satisfaction whereas only 26.5% in paracetamol group. This difference is statically significant (P = 0.004). There was no statistical difference between commencement of breastfeeding, time of commencement as well as time to start ambulating within the two interventional groups (paracetamol and diclofenac) (p value < 0.05)

**Discussion**

Perineal pain is a common but poorly studied fallout of vaginal child birth. It has been proven in most studies that if perineal pain following vaginal delivery is not proactively managed; it may have an adverse outcome on maternal and fetal wellbeing.1, 2 This pain is usually maximum in the first week following delivery as elucidated by various studies.2,3 Pain within the first 24 hours especially following perineal tears and episiotomy can affect 85.9% of women and lead

to poor mobility, difficult defecation, micturition and mother-child interactions 7-.9

Four hundred and fifty-two respondents were studied in this research; the socio demographic profile of the respondent was quite similar with mean ages of 29.55 ± 5.69 and 28.81 ± 5.95 for the PCM and Diclofenac groups respectively, the tribe as expected was skewed towards the Yoruba because of the study location which is in the south west and mainly Yoruba speaking community. This may however not affect the applicability of the major findings of this study as other socio demographic and clinical characteristics of the respondent were not different from the general obstetric population.11

The parity of the respondents in the study groups were quite similar with about 18.6% and 26.5% of primiparous in the PCM and Diclofenac groups respectively and with 81.4% and 73.4% being multiparous in the PCM and Diclofenac groups respectively. MacArthur and colleagues concluded that multiparous women experienced 10-30%less perineal discomfort than primiparous women in the first week postpartum; this even distribution thus removed parity as a confounding factor.

About 29.2% of the diclofenac group had episiotomy, it was slightly higher than the PCM group that only about 24.8% had episiotomies, though also this difference was not statistically significance. About 30.50% patients in the PCM group had tear which is slightly higher than 27.4% in the diclofenac group; the difference was however not statistically significant. Lim and colleagues in 20082, reported about 97% of patient with episiotomies had perineal pain and 95% of those with 1st and 2nddegree perineal tears had perineal pain which is greater than only about 75% of women who had no such perineal tears or episiotomies and subsequently had no perineal pain. According to our perineal tear was equally distributed and hence results obtained can be universally applied.

About 92 out of the 452 respondents studied used analgesia during labor. 54 out of them were in the PCM group and 38 in the diclofenac group, the distribution was however not statistically significant. The baseline pain evaluation of those that had analgesia was however statistically significant within the two study groups but this does not have any direct effect on our study as the drugs for pain relief had not been given at this time and therefore has no impact on the outcome of this study. This can be further justified by the pain score evaluation of those that used analgesia in labor at 12hours as the difference was not statistically significant at this time.

The pain score at 2hrs (baseline pain evaluation before the intervention drug was given) was thus for the PCM group; 7 respondents had no pain, 78 had mild pain, 88 had moderate pain and 53 had severe pain, the distribution was only slightly different for the diclofenac group having 10 respondents with no pain, 81 had mild pain, 87 also had moderate pain and 42 had severe pain. This partly agrees with studies by Lim and colleagues that stated that even parturient with intact perineum may have perineal pain.2

At 12hours also, it is noteworthy that most respondents that had severe pain at the baseline evaluation had reduced significantly and this was likely due to the intervention of drugs given. At 24 hours,36 hours and 48 hours the pain score distribution between the intervention groups was statistically different. More patient in the diclofenac group had less relative pain.

A comprehensive relief evaluation of both intervention group yielded interesting results. A thorough look into the PCM group showed significant relief of the respondent progressively at 12 hours, 24 hours,36 hours and 48 hours. This agrees with previous studies that submitted that PCM is effective for relief of perineal pain following vaginal delivery. A Cochrane database of systemic review by Toms and colleagues showed that oral paracetamol is highly effective in reducing pain in a number of patients that had perineal pain.12 Further studies also corroborated this and showed beyond reasonable doubt that PCM was an effective postpartum analgesic for perineal pain.13,14

The respondents in the diclofenac study group showed significant relief as time progressed from the 12hour evaluation down to the 48hour evaluation. The relief was better with the diclofenac group compared to the PCM group. Earlier studies had also shown that diclofenac provided effective analgesia after perineal repair and its effect lasts up to the second and third postpartum day; although none of them compared it with paracetamol15,16

It is pertinent to note that all of the 452-respondent studied, none in both intervention groups revealed any obvious side effect, this also agrees with previous studies that suggested the safety of both intervention drugs with no obvious maternal or neonatal side effects. Earlier study by Ghosh and colleagues had also elucidated the safety of PCM and diclofenac in breast milk.9

Comparing both the PCM and diclofenac study group in terms of their effectiveness which is one of the specific objectives of this study, there was statistical significance between the two interventional groups in their relief evaluation at 12hours, 24hours,36hours and 48 hours post-delivery suggesting that diclofenac was more effective in relieving perineal pain post vaginal child birth. Also, Facchinetti and colleagues demonstrated the superiority of diclofenac to other NSAIDs in terms of lesser adverse reaction together with a faster action in the relief of pain; this is one of the reasons why diclofenac was chosen for this study.17

Evaluating for satisfaction within the two study groups showed that more respondents had maximum satisfaction in the diclofenac group when compared to the PCM group, the difference for this was statistically significant.

With respect to the secondary outcomes, the time to ambulation between the study groups showed slight difference, most respondents ambulated within 1-2hours and only 4.0% of respondent in the PCM group ambulated after 2hours, 2.7% of respondents in the diclofenac group ambulated after 2hours, the difference was however not statistically significant.Similarly, there was no statistically significant difference in the need for additional analgesia in between groups.

**Conclusion**

Oral diclofenac is more effective in relieving perineal pain after vaginal child birth. There was no obvious maternal or neonatal side effect seen when diclofenac and PCM were used for control of perineal pain following vaginal birth. Women on diclofenac were more satisfied than those on PCM.

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