

## Psychosocial and Care Context Factors Associated With Trauma Symptom Scores Among Women Receiving Postabortion Care in Nakuru Kenya

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### ABSTRACT

**Background:** Support and prior experiences may be relevant to distress in postabortion care, but a cross-sectional screening score cannot identify causes or diagnose a disorder. **Objective:** To describe selected psychosocial and care-context characteristics in relation to trauma symptom-score categories among women receiving care at Nakuru Level Five Referral Hospital. **Methods:** Objective Three of a 2020 thesis supplied five-band cross-tabulations for 192 patients. We calculated proportions at the thesis threshold of 38, risk differences with Newcombe 95% confidence intervals, two-sided Fisher exact p-values and Holm adjustments across ten exploratory comparisons. **Results:** Scores of at least 38 occurred in 150/192 (78.1%). The risk difference for reported inclusion support versus none was –34.7 percentage points (95% CI –44.2 to –24.3); for practical support it was –35.2 (–48.3 to –21.7). Inadequate information showed a difference of 22.1 points (10.7 to 31.6). A prior mood-condition table has a counterintuitive 11/31 versus 139/161 pattern requiring source verification. **Conclusion:** The associations are exploratory and potentially affected by coding inconsistencies, selection and confounding; they do not establish causal effects. Respectful, voluntary assessment and clear information remain appropriate service priorities.

**Keywords:** mental health, postabortion care, psychosocial support, screening, trauma symptoms

### 1. INTRODUCTION

Postabortion care should be responsive to the person's health and support needs. WHO (2022) recommends a respectful approach to comprehensive abortion care. Assessment measures can inform further evaluation but should not alone establish a clinical diagnosis (American Psychiatric Association [APA], 2022). Prospective evidence emphasizes the importance of prior mental health and other life experiences when interpreting later trauma symptoms (Biggs et al., 2016). This article addresses the third objective of Mitheu's 2020 thesis, which examined psychosocial, prior-health and care-context factors alongside symptom scores in one Nakuru referral-hospital sample.

### 2. METHODS

The original cross-sectional thesis sampled 192 women attending the gynaecology department for abortion-related treatment. It used a modified 17-item, five-response trauma symptom instrument. We treat its score bands as screening categories, with elevated scores at 38 or more; the displayed lower bands overlap at 28. We transcribed count cells from thesis Tables 4.18, 4.19, 4.21, 4.22, 4.23 and 4.25 when two rows each totaled 192 and the five outcome columns totaled 25, 17, 6, 13 and 131. Each selected yes/no comparison was reduced to a two-by-two table at score 38. We report the unadjusted yes-minus-no percentage-point risk difference with a Newcombe 95% interval based on Wilson score limits, two-sided Fisher exact p-values and Holm-adjusted p-values across ten selected displayed comparisons. This post hoc set does not exhaust all thesis indicators. Intervals and tests quantify sampling variation only; they do not resolve coding, selection, measurement or confounding. No participant-level records, adjusted models, validated local threshold or diagnostic interviews were available. The thesis describes consent and permissions, but approval identifiers require confirmation from the original records.

### 3. RESULTS

All tabulated indicators below are separate yes/no questions, so their rows overlap and should not be added across indicators. The score  $\geq 49$  column reflects the thesis's highest score band, not a diagnosis.

**Table 1. Support and care-context indicators by symptom-score bands**

| Indicator              | Response | n   | Score $\geq 38$ , n (%) | Score $\geq 49$ , n (%) |
|------------------------|----------|-----|-------------------------|-------------------------|
| Inclusion support      | Yes      | 108 | 68 (63.0)               | 63 (58.3)               |
|                        | No       | 84  | 82 (97.6)               | 68 (81.0)               |
| Emotional support      | Yes      | 68  | 44 (64.7)               | 42 (61.8)               |
|                        | No       | 124 | 106 (85.5)              | 89 (71.8)               |
| Practical support      | Yes      | 61  | 33 (54.1)               | 30 (49.2)               |
|                        | No       | 131 | 117 (89.3)              | 101 (77.1)              |
| Privacy concerns       | Yes      | 153 | 131 (85.6)              | 116 (75.8)              |
|                        | No       | 39  | 19 (48.7)               | 15 (38.5)               |
| Decision not own       | Yes      | 66  | 42 (63.6)               | 34 (51.5)               |
|                        | No       | 126 | 108 (85.7)              | 97 (77.0)               |
| Inadequate information | Yes      | 67  | 62 (92.5)               | 50 (74.6)               |
|                        | No       | 125 | 88 (70.4)               | 81 (64.8)               |

Inclusion, emotional and practical support were each associated descriptively with lower elevated-score proportions. Privacy concerns and reports of inadequate information showed higher proportions. The decision-ownership contrast points in an unexpected direction; wording, timing, coding and confounding need checking before interpretation. These are self-reports, and no claim about the effects of any care decision follows from the cross-sectional contrasts.

**Table 2. Prior-health and timing indicators by symptom-score bands**

| Indicator               | Response | n   | Score $\geq 38$ , n (%) | Score $\geq 49$ , n (%) |
|-------------------------|----------|-----|-------------------------|-------------------------|
| Prior mood condition    | Yes      | 31  | 11 (35.5)               | 9 (29.0)                |
|                         | No       | 161 | 139 (86.3)              | 122 (75.8)              |
| Prior anxiety condition | Yes      | 74  | 64 (86.5)               | 52 (70.3)               |
|                         | No       | 118 | 86 (72.9)               | 79 (66.9)               |
| One prior abortion      | Yes      | 27  | 19 (70.4)               | 18 (66.7)               |
|                         | No       | 165 | 131 (79.4)              | 113 (68.5)              |
| Before 13 weeks         | Yes      | 119 | 102 (85.7)              | 85 (71.4)               |
|                         | No       | 73  | 48 (65.8)               | 46 (63.0)               |

The prior mood-condition pattern is inconsistent with the thesis narrative and should be verified against source questionnaires. The “one prior abortion” indicator was 19/27 (70.4%) versus 131/165 (79.4%). The before-13-weeks row was 102/119 (85.7%) versus 48/73 (65.8%); this is descriptive and cannot isolate timing from other circumstances.

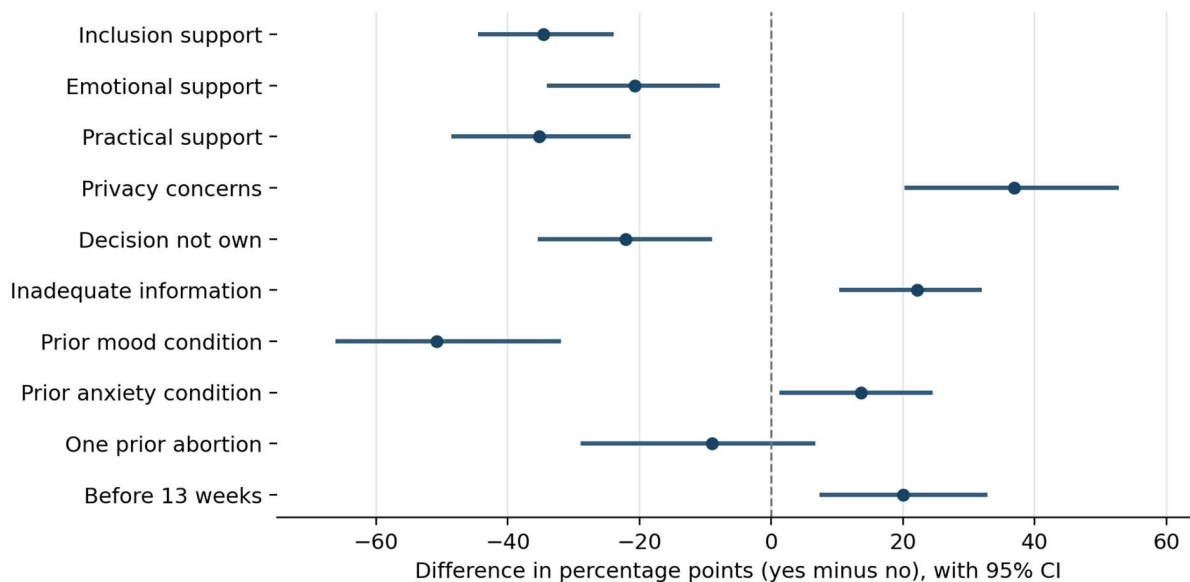
### 3.1 Quantitative comparison and statistical audit

**Table 3. Unadjusted differences in elevated-score proportion: yes minus no**

| Indicator               | Difference in points (95% CI) | Fisher p | Holm p |
|-------------------------|-------------------------------|----------|--------|
| Inclusion support       | -34.7 (-44.2 to -24.3)        | < .001   | < .001 |
| Emotional support       | -20.8 (-33.7 to -8.2)         | 0.002    | 0.007  |
| Practical support       | -35.2 (-48.3 to -21.7)        | < .001   | < .001 |
| Privacy concerns        | +36.9 (+20.5 to +52.5)        | < .001   | < .001 |
| Decision not own        | -22.1 (-35.2 to -9.3)         | < .001   | 0.004  |
| Inadequate information  | +22.1 (+10.7 to +31.6)        | < .001   | 0.002  |
| Prior mood condition    | -50.9 (-65.9 to -32.2)        | < .001   | < .001 |
| Prior anxiety condition | +13.6 (+1.6 to +24.1)         | 0.031    | 0.063  |
| One prior abortion      | -9.0 (-28.7 to +6.3)          | 0.318    | 0.318  |
| Before 13 weeks         | +20.0 (+7.6 to +32.5)         | 0.002    | 0.007  |

Confidence intervals are Newcombe score intervals for two independent proportions. Fisher exact p-values are two-sided; Holm p-values address these ten comparisons only. The thesis instead repeats a single five-band chi-square result across several different questions. The table uses each question’s actual integer counts. Statistical compatibility with a nonzero difference is not evidence of causation or an independently predictive effect.

**Figure 1. Elevated-score differences for ten thesis indicators; horizontal lines are Newcombe 95% confidence intervals.**



Negative differences mean a lower observed proportion in the “yes” group. The prior mood-condition result and other unexpected directions require source-data verification. The figure is descriptive and shares the table’s limitations.

#### 4. DISCUSSION

The support comparisons suggest service questions worth studying prospectively: whether patients have a trusted person to consult, what practical help is available, and whether information is understood. They do not show that supplying support would change symptom scores. Fisher tests avoid the sparse five-band asymptotic approximation after dichotomization, and Holm correction controls the family-wise error rate across these ten reported tests, but neither corrects selection bias, multiple possible choices of indicators, exposure misclassification or confounding. The source narrative and cell counts disagree for some indicators, particularly prior mood history and decision ownership; these should be checked before substantive inference. The instrument's local modification and threshold validation are incomplete. Biggs et al. (2016) used prospective comparisons and assessed other experiences, illustrating a design better suited to causal questions. WHO (2022) supports respectful care; services can offer private, voluntary assessment and referral without assuming psychological state from a contextual marker.

#### 5. CONCLUSION

Objective Three's displayed tables contain exploratory associations involving support, information, prior health and care circumstances in a sample of 192. Their sparse cells and inconsistencies preclude reliable claims about independent predictors or causation. A future study should verify source coding, use validated measures, specify timing, document ethics approval, and fit a prespecified model with adequate sample size.

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