

Sociodemographic Characteristics and Post Traumatic Stress Symptom Scores Among Women Receiving Postabortion Care in Nakuru Kenya

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ABSTRACT

Background: Sociodemographic differences in distress among postabortion patients may help services offer responsive care, but symptom scores alone cannot establish diagnosis or causation. **Objective:** To describe the association of sociodemographic characteristics with post-traumatic stress symptom-score categories at Nakuru Level Five Referral Hospital. **Methods:** We re-tabulated seven five-category cross-tabulations reported in a 2020 cross-sectional thesis ($n = 192$), defining elevated scores as the three bands beginning at 38. We recalculated Pearson chi-square statistics from the displayed cell counts and assessed sparse expected counts. **Results:** Overall, 150/192 (78.1%) had scores of at least 38. Elevated-score proportions varied by age (74.6% at 15–24; 72.8% at 25–34; 94.6% at 35–44), previous births (55.8% with none; 91.7% with three or more), and other characteristics. Recalculated five-category chi-square statistics matched six thesis tables; the education table yielded $\chi^2(24) = 47.575$, $p = .00285$, rather than its printed $\chi^2(28) = 70.511$. Every cross-tabulation had many expected cells below five. **Conclusion:** The displayed counts suggest demographic variation in scores within this facility sample, but sparse cells, an instrument with incomplete local validation and the observational design limit statistical and clinical interpretation.

Keywords: Kenya, postabortion care, screening, sociodemographic characteristics, trauma symptoms

1. INTRODUCTION

Respectful postabortion care includes attention to physical, mental and social well-being (WHO, 2022). Distress scores can identify patients who may welcome further assessment, yet a screening result is not a clinical diagnosis (American Psychiatric Association [APA], 2022). A prospective study by Biggs et al. (2016) illustrates why cross-sectional differences should not be interpreted as evidence that an abortion caused later symptoms: prior experiences and comparison groups matter. This paper addresses the second objective of Mitheu's 2020 thesis: the relationship between sociodemographic characteristics and symptom categories in women receiving care at a Nakuru referral hospital.

2. METHODS

The source thesis used a cross-sectional descriptive design and systematically selected 192 women attending the gynaecology department for abortion-related treatment. Its modified 17-item, five-response trauma symptom scale produced five score bands: 17–28, 28–37, 38–43, 44–48 and 49 or more. The first two displayed bands overlap at 28. Here, “elevated” means a total score of at least 38 according to the thesis classification, not confirmed PTSD. We transcribed integer counts from thesis Tables 4.11–4.17, summed the three elevated bands, and recalculated row percentages and unadjusted Pearson chi-square tests for the original five-band outcome. No individual participant data, covariate adjustment or exact tests were available. Sparse expected counts make asymptotic p-values unreliable. The thesis reports consent and institutional permissions, but exact ethics identifiers should be checked against source records before submission.

3. RESULTS

The five score-band totals were 25, 17, 6, 13 and 131, respectively ($n = 192$). Tables 1 and 2 summarize the displayed counts by characteristic. Values in small groups, particularly a single widowed or business-employed respondent and three respondents aged 45 or more, should not be generalized.

Table 1. Age, marital status, education and parity by symptom-score category

Characteristic	Group	n	Score ≥ 38 , n (%)	Score ≥ 49 , n (%)
Age (years)	15–24	71	53 (74.6)	36 (50.7)
	25–34	81	59 (72.8)	57 (70.4)
	35–44	37	35 (94.6)	35 (94.6)
	45 or more	3	3 (100.0)	3 (100.0)
Marital status	Monogamous marriage	70	50 (71.4)	48 (68.6)
	Polygamous marriage	26	25 (96.2)	25 (96.2)
	Separated or divorced	19	18 (94.7)	17 (89.5)
	Single	76	56 (73.7)	40 (52.6)
Education	Widowed	1	1 (100.0)	1 (100.0)
	Class 8	9	7 (77.8)	4 (44.4)
	Form 1	7	6 (85.7)	5 (71.4)
	Form 2	16	14 (87.5)	10 (62.5)
	Form 3	26	23 (88.5)	22 (84.6)
	Form 4	72	62 (86.1)	58 (80.6)
	College	53	32 (60.4)	26 (49.1)
	University	9	6 (66.7)	6 (66.7)
Previous births	None	52	29 (55.8)	22 (42.3)
	One	66	56 (84.8)	45 (68.2)
	Two	50	43 (86.0)	42 (84.0)
	Three or more	24	22 (91.7)	22 (91.7)

Elevated-score categories increase across parity groups in the displayed data. For marital status and education, several categories have few respondents, and even large apparent differences are unstable. The 15–24 age row contains 36 severe scores among 71 respondents (50.7%); the thesis narrative incorrectly calls this 100%.

Table 2. Religion, employment and income source by symptom-score category

Characteristic	Group	n	Score ≥ 38 , n (%)	Score ≥ 49 , n (%)
Religion	Protestant	85	67 (78.8)	56 (65.9)
	Catholic	72	50 (69.4)	46 (63.9)
	Indigenous	11	11 (100.0)	9 (81.8)
	Other	24	22 (91.7)	20 (83.3)
Employment	Not employed	84	59 (70.2)	48 (57.1)
	Full time	52	37 (71.2)	37 (71.2)
	Part time	18	16 (88.9)	15 (83.3)
	Other	37	37 (100.0)	30 (81.1)
Income source	Business	1	1 (100.0)	1 (100.0)
	Family remittance	32	27 (84.4)	21 (65.6)
	Farming	37	35 (94.6)	33 (89.2)
	Salary	54	38 (70.4)	37 (68.5)
	Casual work	65	46 (70.8)	36 (55.4)
	Business	4	4 (100.0)	4 (100.0)

The thesis reported childhood adversity descriptively (Table 4.5), but did not provide a cross-tabulation with the score categories for this objective. We therefore cannot estimate a childhood-adversity association from the supplied tables.

Table 3. Recalculated unadjusted Pearson tests for the five thesis score bands

Characteristic	χ^2	df	p	Expected cells <5
Age (years)	38.573	12	< .001	12/20
Marital status	33.124	16	0.007	16/25
Education	47.575	24	0.003	26/35
Previous births	37.400	12	< .001	12/20
Religion	17.608	12	0.128	11/20
Employment	30.721	16	0.015	17/25
Income source	26.430	16	0.048	18/25

The thesis education cross-tabulation gives $\chi^2(28) = 70.511$, whereas its seven rows and five columns imply 24 degrees of freedom and yield $\chi^2(24) = 47.575$ from the displayed counts. The discrepancy requires source-data verification. All seven tests violate the usual sparse-cell caution; their p-values are exploratory and do not establish independent effects. The other six statistics reproduce the source counts, including income $\chi^2(16) = 26.430$, $p = .048$, despite a contradictory degree-of-freedom statement in the thesis prose.

4. DISCUSSION

Within this service sample, symptom scores differed descriptively across demographic groups, most clearly in the parity and age tables. These differences might reflect prior adversity, health circumstances, service selection or other unmeasured factors. Neither temporal order nor independent effects can be established. The multiple unadjusted tests and small categories make chance findings plausible. The locally modified scale lacks complete scoring and threshold validation, so reported “severe” categories remain score bands rather than clinical diagnoses. A prospective design with validated assessment, careful recruitment records and appropriately combined categories would provide stronger evidence. WHO (2022) supports respectful, person-centred care, and the present results can inform an offer of voluntary support without profiling patients by demographic status.

5. CONCLUSION

The thesis cross-tabs show variation in elevated symptom scores among 192 patients; 150 scored at least 38. This paper provides corrected row proportions and identifies an education-test discrepancy and extensive sparse cells. These descriptive findings do not support causal claims or a clinical PTSD diagnosis. Verify the education table and ethics documentation before journal publication.

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