

Observed Infant Sleep Practices in Postnatal Wards of the Western Cape, South Africa: Insight into what is being practised

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Abstract

Background:

Sudden infant death syndrome (SIDS) remains a leading cause of post-neonatal mortality globally. Although evidence-based behavioural interventions have significantly reduced SIDS incidence in high-income countries, comparable reductions have not been observed in many low- and middle-income countries (LMICs).

Objective:

To describe observed infant sleep practices in postnatal wards in the Western Cape and to evaluate adherence to American Academy of Pediatrics (AAP) safe-sleep recommendations.

Methods:

A descriptive, cross-sectional observational study was conducted across three public institutions in their postnatal wards. Non-participant structured observations of sleeping infants were performed using a standardised checklist. Data was collected and recorded on five non-consecutive days over the period May 2025 to November 2025. Sleep position, bedding, sleep surface, bedsharing practices and environmental risk factors were recorded. Data were analysed descriptively with pooled proportions and 95% confidence intervals.

Results

A total of 324 infants were admitted to the postnatal wards across the three study sites, of whom 60.8% (n = 197) were directly observed during the study period. The findings indicate a high prevalence of unsafe infant sleep practices. Supine sleeping, the recommended sleep position, was observed in only 25% of infants, while 66% were placed in the side-lying position. A range of potentially hazardous sleep-environment factors was frequently documented, including loose blankets (76%), loose clothing (69%), soft sleep surfaces (84%), and frequent head covering. Bed sharing was also prevalent, occurring in 57% of observations overall, with substantial variation between sites. The highest prevalence was observed at Tygerberg Hospital, where nearly 80% of infants shared a sleep surface. Marked inter-site variation was evident across most sleep-related variables, with statistically significant differences observed between hospitals ($p < 0.05$).

Conclusion

Unsafe infant sleep practices were highly prevalent in postnatal wards of public hospitals in the Western Cape, with multiple interacting risk factors known to increase the likelihood of sudden infant death syndrome (SIDS) and other sleep-related infant deaths. The low prevalence of supine positioning and predominance of side sleeping are concerning due to the risk of rollover into the prone position. Significant inter-site variation suggests inconsistent staff messaging and uneven adherence to safe-sleep guidelines.

INTRODUCTION

Sudden infant death syndrome (SIDS) is defined as the sudden and unexplained death of an infant under one year of age that remains unexplained after comprehensive investigation, including autopsy, review of clinical history, and examination of the circumstances of death (1, 2). Despite decades of research, SIDS remains a diagnosis of exclusion and a major contributor to infant mortality worldwide.

In high-income countries, population-level reductions in SIDS have been achieved primarily through behavioural modification strategies targeting modifiable risk factors. The introduction of the “Back to Sleep” campaign in the United States in the early 1990s, later renamed “Safe to Sleep”, was associated with a greater than 50% reduction in SIDS rates within a decade (2). Central to this success was the promotion of supine infant sleep positioning, avoidance of soft bedding, room-sharing without bed-sharing, and reduction of smoke exposure (2).

In contrast, the burden of SIDS in low- and middle-income countries (LMICs) remains poorly characterised and likely underestimated due to challenges in death certification, limited access to forensic investigations, and inconsistent surveillance systems (3). Available evidence suggests that SIDS rates in LMICs are substantially higher than in high-income settings. The Safe Passage Study, conducted in South Africa between 2007 and 2015, reported a SIDS incidence of 2.43 per 1 000 live births which is one of the highest documented globally (4, 5).

Evidence from both high-income countries and LMICs consistently identifies prone and side sleeping, soft sleep surfaces, bed-sharing, and excessive or loose bedding as key modifiable risk factors for SIDS (1, 6). Studies from sub-Saharan Africa demonstrate high prevalence of these behaviours. In Zambia, 73% of caregivers reported side sleeping and nearly 90% reported bed-sharing (6). A systematic review of African studies found low awareness of SIDS, with common behaviours including prone sleeping, soft bedding, and household smoke exposure (7).

Importantly, the hospital postnatal period represents a critical opportunity for modelling safe infant sleep behaviours. Evidence indicates that caregiver practices at home are strongly influenced by hospital practices and health-care worker guidance (2). However, data describing actual infant sleep practices in hospital settings in South Africa are scarce. Without understanding current practice, targeted interventions cannot be effectively designed.

METHODS

Aim, study design and setting of study

This study aimed to describe observed infant sleep practices in postnatal wards in the Western Cape, South Africa, and to assess alignment with AAP safe-sleep recommendations, with particular emphasis on modifiable behaviours relevant to LMIC contexts. A descriptive, cross-sectional observational study was conducted using non-participant structured observations. The study was conducted in postnatal wards at three public hospitals in the Western Cape: Tygerberg Academic Hospital (TBH) (tertiary), Worcester Provincial Hospital (WPH) (regional), and Paarl Provincial Hospital (PPH) (regional). These facilities serve predominantly low- and middle-income populations.

Participants

All infants admitted to the postnatal wards during observation periods were eligible for inclusion if they were directly observed sleeping. Infants admitted to neonatal or intensive care units were excluded, as were infants engaged in feeding or skin-to-skin care at the time of observation.

Sampling and data collection

Observations were conducted on five randomly selected days per site over six-month period (May 2025 to November 2025). Trained health-care professionals conducted observations during routine ward activities to minimise behaviour modification. A standardised checklist (Appendix A) was used to document sleep position, bedding, sleep surface, head and face covering, room-sharing and bed-sharing practices. Observed variables were aligned with AAP safe-sleep recommendations and included: sleep position (supine, side, prone), sleep surface (firm vs soft, inclined), bedding (number of blankets, loose bedding), infant clothing and head covering and sleep location (crib vs bed-sharing).

Statistical analysis

Data were analysed using Stata 17.0. Results were summarised using frequencies, percentages and pooled estimates with 95% confidence intervals. Differences between sites were assessed using ANOVA and chi-square testing, with significance set at $p < 0.05$.

Ethical considerations

Ethics approval

was obtained from the Stellenbosch University Health Research Ethics Committee (N24/10/119) and the Western Cape Department of Health (WC_202502_017). As observations were non-intrusive and

anonymous, a waiver of informed consent was granted. Caregivers received safe-sleep educational pamphlets after observation periods.

RESULTS

A total of 324 infants were admitted to the postnatal wards across the three study sites during the study period (Fig. 1). Of these, 197 infants (60.8%) were directly observed while sleeping during the observation periods and were therefore included in the analysis. The remaining 127 infants (39.2%) were excluded because they were not sleeping at the time of observation.

Tygerberg Hospital (TBH) accounted for the largest proportion of admissions (178/324), followed by Paarl Hospital (PPH) (106/324) and Worcester Hospital (WPH) (40/324). The proportion of infants observed sleeping varied by site, with the highest proportion at TBH (66.9%, 119/178), followed by PPH (55.7%, 59/106) and WPH (47.5%, 19/40) see details in Fig. 1. Of the infants excluded from observation, the most common reason for exclusion was breastfeeding, accounting for 79 infants (62.2%), followed by changing (13.4%), cuddling (10.2%), skin-to-skin care (12.6%), and being awake at the time of observation (1.6%). At TBH, breastfeeding was also the most frequent reason for exclusion (69.5%), whereas at WPH exclusions were evenly split between breastfeeding and skin to skin care (each 47.6%). At PPH, breastfeeding remained the leading reason (59.6%), followed by cuddling (19.2%).

Observations of infant sleep practices in postnatal wards in Western Cape

Across the three Western Cape postnatal wards of TBH, WPH, and PPH infant sleep practices varied considerably, with several practices diverging from recommended safe-sleep guidelines.

Sleep Position

Supine positioning (the recommended safe position) was used in only 25.1% of infants (95% CI: 19.0–31.1). Rates ranged from 25.2% at TBH to 36.8% at WPH and 22.0% at PPH ($PV < 0.001$). Side sleeping was the most common position overall at 66.2% (95% CI: 56.2–76.3), with significant differences between sites ($PV < 0.001$), particularly at PPH (76.3%). Prone sleeping was less frequent (7.4%, 95% CI: –1.25–16.05) but varied notably, used at TBH (14.3%), but was rare at PPH (1.7%).

Blanket Use

Use of one blanket varied widely from 30.5% at PPH to 94.7% at WPH with a pooled estimate of 53.8% (95% CI: 20.9–86.7; $PV < 0.001$).

The pooled two blankets were used in 58.2% (95% CI: 46.9–69.6), showing significant between-site variation ($PV < 0.001$) and highest at PPH (66.1%). Three-blanket use was less frequent overall (8.8%) but still notable at TBH (15.1%) ($PV = 0.03$). This can be explained by the ward's individual practices, as WPH

restricts patients from using their own clothing and bedding for themselves or their infant and provides all the blankets and clothing needed. Whereas PPH and TBH allow patients to use their own clothing and blankets.

Loose Clothing and Loose Blankets

The presence of loose clothing was high overall 69.2% (95% CI: 26.14–112.19) $PV < 0.001$), driven by extremely high levels at PPH (100%) ($PV < 0.001$). Loose blankets were also common (76.3%, 95% CI: 47.4–105.3; $PV < 0.001$), with particularly high prevalence at TBH (85.7%) and PPH (100%).

Face and Head Covering

Overall, 30.8% of infants had partially or fully covered their faces ($PV = 0.01$). Head covering while keeping the face exposed occurred in 72.8% (95% CI: 49.04–96.57) $PV < 0.001$), with very high at PPH (89.8%) ($PV < 0.001$).

Sleeping Surface and Positioning

Soft surfaces were used for most infants (84.2%, $PV < 0.001$), reaching almost universal use at WPH (100%). Sleeping on an incline occurred in 21.5% of cases and was most common at TBH (33.1%).

Sleep Location

Only 42.6% of infants slept in a crib, while 57.4% co-slept in a bed ($PV < 0.001$). TBH had the highest bed-sharing prevalence (79.8%), compared with 47.4% at Worcester Hospital and 40.7% at Paarl Hospital ($PV < 0.001$). This study found marked inter-site variation, confirmed by statistically significant differences across most variables ($p < 0.05$), suggesting substantial differences in institutional practices, staff training, and resource availability between hospitals.

Table 1
Distribution of observations of infant sleep practices in postnatal wards at three study sites in the Western Cape 2026

Variable	TBH	WPH	PPH	Pooled	PV
Sleep Position					
Supine	25.20 (17.40–33.00)	36.80(15.12–58.48)	22.00(11.43–32.57)	25.06(19.03–31.08)	0.00
Side	58.80 (49.96–67.64)	63.20(41.52–84.88)	76.30(65.45–87.15)	66.24(56.16–76.32)	0.00
Prone	14.30 (8.01–20.59)	—	1.70 (-1.60–5.00)	7.40(-1.25–16.05)	0.09
Other	1.70 (-0.62–4.02)	—	—	1.70(-0.62–4.02)	0.15
Number of blankets used					
One	36.13(27.50–44.76)	94.70 (84.63–104.77)	30.50 (18.75–42.25)	53.81(20.98–86.65)	0.00
Two	49.70(43.27–56.13)	—	66.10 (61.48–70.72)	58.22(46.87–69.57)	0.00
Three	15.10(8.67–21.53)	—	3.40 (-1.22–8.02)	8.80(0.74–16.86)	0.03
Presence of Loose Clothing	37.80(29.09–46.51)	—	99.90 (99.09–100.71)	69.17 (26.14–112.19)	0.00
Face Covered	16.00(9.41–22.59)	—	47.50 (34.76–60.24)	30.76 (9.02–52.51)	0.01
Loose Blankets Present	85.70(79.41–91.99)	36.80 (15.12–58.48)	99.99 (99.74–100.24)	76.30 (47.35–105.25)	0.00
Number of Layers of clothing					
One	47.10(38.12–56.08)	94.70 (84.63–104.77)	—	70.79 (37.80–103.77)	0.00
Two	50.40 (41.42–59.38)	5.30 (-4.77–15.37)	67.80 (55.88–79.72)	41.06 (11.33–70.79)	0.01
Three	2.50 (-0.30–5.30)	—	32.20 (20.28–44.12)	16.17 (-4.28–36.62)	0.12
Head Covered (Face Exposed)	55.50 (46.56–64.44)	—	89.80 (82.08–97.52)	72.80 (49.04–96.57)	0.00

Variable	TBH	WPH	PPH	Pooled	PV
Sleep Position					
Soft Surface	88.20 (82.40–94.00)	99.99 (99.54–100.44)	61.00 (48.55–73.45)	84.15 (66.33–101.97)	0.00
Sleeping on an Incline	33.10 (24.65–41.55)	–	10.20 (2.48–17.92)	21.52 (5.65–37.38)	0.00
Sleep Location					
Crib	20.20 (12.99–27.41)	52.60 (30.14–75.06)	59.30 (46.76–71.84)	42.63 (21.74–63.51)	0.00
Bedsharing	79.80 (72.59–87.01)	47.40 (24.94–69.86)	40.70 (28.16–53.24)	57.37 (36.49–78.26)	0.00

TBH- Tygerberg Hospital WPH- Worcester Hospital PPH- Paarl Hospital

Table 2 presents the distribution of the cumulative number of risk factors for sudden infant death syndrome (SIDS) identified among the 197 participants in the study. The findings show that most participants were exposed to multiple risk factors, with the highest proportion (26.9%) having seven risk factors present. Overall, more than half (55.4%) of the sample had six or more risk factors, indicating a high clustering of SIDS related risks within the study population. In contrast, very few participants had only two or three risk factors, suggesting that low overall risk exposure was uncommon in this group. Of note, nine infants demonstrated ten risk behaviours for SIDS.

Table 2
Frequency of the presence of the number of modifiable risk behaviours present per infant in the Western Cape, to prevent SIDS.

Number of risk factors present	N (197)	%	Cumulative %
2	2	1	1
3	13	6.6	7.6
4	18	9.1	16.7
5	26	13.2	29.9
6	29	14.7	44.6
7	53	26.9	71.5
8	26	13.2	84.7
9	21	10.7	95.4
10	9	4.6	100

DISCUSSION

This multisite observational study demonstrates a pervasive pattern of unsafe and modifiable infant sleep practices in postnatal wards of public-sector hospitals in the Western Cape, South Africa. The findings highlight a substantial discrepancy between evidence-based safe sleep recommendations and real-world clinical practice in a LMIC setting with a documented high burden of SIDS. Importantly, these unsafe practices were observed within hospital environments, where care is directly supervised by health professionals and where caregiver behaviours are most amenable to early influence.

Sleep position and perceived safety

The most concerning finding was the very low prevalence of supine sleeping, observed in only one quarter of infants. Supine positioning is consistently identified as the single most effective modifiable intervention for reducing SIDS, with evidence suggesting that adherence alone can prevent up to 70% of cases (2, 8). Despite this robust evidence base, side sleeping was the predominant position across all three hospitals, echoing findings from other LMIC contexts including Zambia and Brazil (3, 7).

The persistence of side positioning likely reflects deeply entrenched cultural beliefs and misconceptions, particularly the fear of choking or aspiration if infants are placed supine (9). Multiple physiological and epidemiological studies have demonstrated that supine positioning does not increase aspiration risk, even in infants with gastro-oesophageal reflux disease (10, 11). Nevertheless, fear of aspiration has repeatedly been cited as a rationale for non-supine positioning among both caregivers and healthcare workers (12). Our findings suggest that these misconceptions remain influential within South African hospital practice and continue to undermine adherence to safe sleep guidelines.

Soft sleep surfaces and synergistic risk

The widespread use of soft sleep surfaces, observed in over 80% of infants, represents another major concern. Soft surfaces increase the risk of suffocation, rebreathing of carbon dioxide, and impaired arousal, particularly when combined with non-supine sleeping positions (1). Case-control studies have demonstrated that soft surfaces independently increase SIDS risk fivefold, and when combined with prone positioning, the risk increases more than twentyfold (13).

In hospital settings, the use of pillows, folded blankets, or inclined mattresses may be perceived as improving infant comfort or reducing regurgitation. However, current evidence explicitly advises against inclined or soft sleep surfaces in both hospital and home environments (14). The high prevalence of such practices in this study suggests a lack of alignment between staff knowledge, institutional norms, and current guidelines.

Bedding, head covering, and overheating

Loose bedding and excessive layering were common across all sites, with more than three-quarters of infants exposed to loose blankets. Bedding has been identified as a major independent risk factor for

SIDS, increasing risk fivefold irrespective of sleep position (10). Excessive blankets and multiple layers of clothing can lead to infant overheating. It is recommended to avoid over bundling and covering the infant's face and head. It is advised not to place hats on infant's heads when indoors or during sleep (15). From the results, we observed an 85.3% of infants had loose blankets in their sleeping environment and 52.8% of infants had loose clothing on, dressed in clothing that was too big for their age. These risky behaviours place the infants at a higher risk of SIDS.

A systematic review including 10 case-control studies found a higher prevalence of head covering in SIDS cases (24%, 95%CI 22.3 to 27.1%) compared to controls (3.2%, 95% CI 12.6 to 22.7%), with an aOR of 16.9 (95% CI 12.6 to 22.7). The risk association was consistently significant across all 10 including studies (15). In the present study, head covering while sleeping was observed in nearly three-quarters of infants, with partial or complete facial covering in almost one-third. These findings are particularly concerning, as head covering has been shown to occur disproportionately in LMIC settings and among socioeconomically disadvantaged populations (6). Overheating, whether through excessive clothing, multiple blankets, or limited ventilation, further compounds this risk by impairing arousal mechanisms during sleep (2).

Bedsharing and structural constraints

More than half of infants in this study were observed bed-sharing with their caregivers. While room-sharing without bedsharing is protective and associated with up to a 50% reduction in SIDS risk, bedsharing, particularly in the presence of soft bedding, parental fatigue, or substance exposure, significantly increases the risk of sleep-related death (6, 10). Whereas bedsharing increases the risk of SIDS dramatically. An individual level analysis of five major case-control studies in 2012 found an increased risk of SIDS with bed sharing with an OR of 2.7 (95% CI 1.4 to 5.3) (16). Another study conducted a three-year population-based case-control study in England found an increased risk of SIDS with bed sharing for the entire sleep (OR 9.78, 95% CI 4.02 to 23.83), with infants sleeping in a separate room from parents (OR 10.49, 95% CI 4.26 to 25.81) and infants sharing a sofa (OR 48.99, 95% CI 5.04 to 475.60) (17).

In LMIC contexts, bedsharing is often driven by structural constraints such as overcrowded living conditions, limited access to cribs, and sociocultural norms that emphasise proximity and bonding (18). The rate of bed sharing is higher in some racial and ethnic groups such as Black and Hispanic groups. These may be attributed to cultural and personal reasons, such as convenience, bonding, attachment, and family tradition (10). While our study did not capture caregiver intent, the high prevalence of bed-sharing in hospital wards suggests that institutional practices may inadvertently normalise behaviours that are later continued at home. The lack of consistent access to infant-specific sleep furniture in postnatal wards further reinforces these practices.

Hospital modelling and health worker influence

The hospital postnatal period is a critical window for shaping caregiver behaviour. Evidence indicates that parents frequently replicate sleep practices observed during hospitalisation, often perceiving these

practices as implicitly endorsed by healthcare staff (19). When unsafe practices are routinely observed in hospital settings, they become embedded as normative behaviours.

Several studies have demonstrated that healthcare worker knowledge does not consistently translate into practice. Surveys among nursing staff show that while most clinicians are aware that supine positioning reduces SIDS risk, a much smaller proportion consistently place infant's supine while sleeping (12). Factors such as workload, perceived infant discomfort, fear of aspiration, and institutional culture all influence behaviour.

The risk of multiple risk factors

The findings of this study indicate a substantial accumulation of SIDS risk factors among participants, with most infants exposed to multiple concurrent risks rather than isolated factors. The predominance of six or more risk factors suggests significant risk clustering, which is well recognised in SIDS research as compounding vulnerability beyond the effect of individual factors alone. This pattern may reflect underlying socioeconomic, environmental, and caregiving circumstances that contribute simultaneously to several established SIDS risks, such as unsafe sleep environments or prenatal and postnatal exposures. The low proportion of infants with only two or three risk factors further underscores that minimal risk exposure was uncommon in this population. These results highlight the importance of comprehensive, multifactorial prevention strategies that address multiple modifiable risk factors simultaneously, rather than focusing on single behaviours in isolation.

The findings of this study suggest that postnatal wards in the Western Cape currently represent an underutilised opportunity for SIDS risk-reduction. Rather than serving as environments where safe sleep practices are modelled and reinforced, they may inadvertently perpetuate unsafe norms that persist beyond discharge.

Implications for intervention in LMIC settings

A key strength of SIDS prevention is that many effective interventions are low-cost and behaviour-based. Education, consistent messaging, role modelling, and institutional policy alignment have been shown to significantly improve adherence to safe sleep practices (2, 20). Importantly, interventions tailored to LMIC contexts, such as training healthcare workers, adapting guidelines to local realities, and providing feasible alternatives to bed-sharing, have demonstrated success.

The provision of baby sleep boxes, culturally adapted education programmes, and structured safe sleep bundles have all been associated with improved infant sleep safety in resource-limited settings (19, 20). However, for such interventions to be effective, they must be embedded within institutional practice and supported by healthcare workers who are empowered with knowledge and resources.

Strengths and limitations

This study is the first multisite observational study to systematically describe infant sleep practices in South African postnatal wards. The use of direct, non-participant observation allowed for an objective assessment of real-world practices, avoiding reliance on self-report data, which is prone to social desirability bias.

Limitations include the cross-sectional design and the possibility of altered behaviour during observation, although efforts were made to minimise observer effect. The study did not capture caregiver intent, staff rationale, or resource availability, which limits causal inference. Nonetheless, the consistency of findings across multiple sites strengthens their validity.

CONCLUSION

Unsafe infant sleep practices were highly prevalent in postnatal wards of public hospitals in the Western Cape, with multiple interacting risk factors known to increase the likelihood of sudden infant death syndrome (SIDS) and other sleep-related infant deaths. This observational study found widespread use of unsafe sleep practices that may elevate the risk of both SIDS and accidental suffocation. Supine sleeping, the universally recommended sleep position, was observed in only one quarter of infants, while side sleeping predominated (66%), a position associated with instability and an increased risk of rollover into the prone position, particularly among newborns.

A high prevalence of environmental hazards was also documented. These included loose blankets (76%), loose clothing (69%), soft sleep surfaces (84%), and frequent head covering, well-recognised risk factors for suffocation and overheating. Excessive bedding was common, with more than half of infants covered by two or more blankets, a practice strongly associated with overheating and SIDS risk and potentially reflective of environmental temperature concerns or entrenched cultural norms. One in five infants was placed to sleep on an inclined surface, despite international guidance warning against infant sleep incliners due to the risk of airway obstruction. Bed sharing was also highly prevalent, observed in 57% of infants overall, with particularly high rates at Tygerberg Hospital (nearly 80%), suggesting possible structural constraints such as limited cot availability or increased staff workload.

Marked inter-site variation was evident, with statistically significant differences across most sleep-related variables ($p < 0.05$), indicating substantial variation in institutional practices, staff training, and resource availability between hospitals. Together, these findings reveal a critical gap between evidence-based recommendations and hospital practice in a low- and middle-income setting with one of the highest reported SIDS rates globally. The postnatal hospital environment therefore represents a crucial yet under-leveraged opportunity for primary prevention. Addressing modifiable behaviours through healthcare worker education, institutional guideline development, and culturally appropriate caregiver counselling has the potential to substantially reduce preventable infant deaths in South Africa and similar resource-limited contexts. Implications for Clinical Practice

The findings of this study have important implications for clinical practice in postnatal wards. The low prevalence of supine sleeping and widespread use of hazardous sleep environments indicate a clear

need for standardised, evidence-based safe sleep protocols across facilities. Institutional policies aligned with international safe-sleep guidelines should be implemented and routinely reinforced to promote consistent practice among healthcare staff.

The marked inter-site variation observed highlights the importance of ongoing staff education and training. Regular in-service training for nurses, midwives, and support staff should emphasise correct infant sleep positioning, avoidance of loose bedding and soft surfaces, and the risks associated with inclined sleeping and bed sharing. Consistent messaging from healthcare providers is essential, as hospital practices strongly influence caregiver behaviour after discharge.

High rates of bed sharing, particularly in settings with limited cot availability, underscore the need for adequate resources and infrastructure, including sufficient numbers of safe infant sleep spaces. Addressing structural constraints such as overcrowding and staff workload may help reduce reliance on unsafe practices that compromise infant safety.

Postnatal wards also provide a critical opportunity for parent and caregiver education. Modelling safe sleep practices during hospitalisation, combined with clear counselling before discharge, may improve adherence to safe-sleep recommendations at home. Integrating safe sleep education into routine postnatal care could therefore play a pivotal role in reducing preventable sleep-related infant deaths in the community.

Abbreviations

SIDS
Sudden infant death syndrome
AAP
American Academy of Pediatrics
TBH
Tygerberg Hospital
WPH
Worcester Provincial Hospital
PPH
Paarl Provincial Hospital

Declarations

Ethics approval and consent to participate

Ethics approval was obtained from the Stellenbosch University Health Research Ethics Committee (N24/10/119) and the Western Cape Department of Health (WC_202502_017). As observations were non-intrusive and anonymous, a waiver of informed consent was granted.

Consent for publication

Not applicable.

Availability of data and materials

The datasets generated and/or analysed during the current study are available from the corresponding author on reasonable request.

Competing interests and disclosures:

All authors declare no competing interests. Artificial intelligence tools (Microsoft Copilot) were used for language editing only. No AI tools were used for data extraction, analysis, interpretation, or generation of scientific content. Stellenbosch University provided institutional support and academic affiliation for several authors (DS, DD, GSG). The funder had no role in the study design; data collection, analysis, or interpretation; manuscript preparation; or the decision to submit the article for publication. The views expressed in this article are those of the authors and do not necessarily reflect the views of the funder.

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Author Contributions

All authors meet the ICMJE criteria for authorship. DS, DK, and SG were involved in conceptualisation, methodology and writing of the original draft, visualisation and revisions. DS and DD were all involved in methodology and data analysis. All authors were involved in review and editing the final version. DS is responsible for the overall content as PI.

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Figures

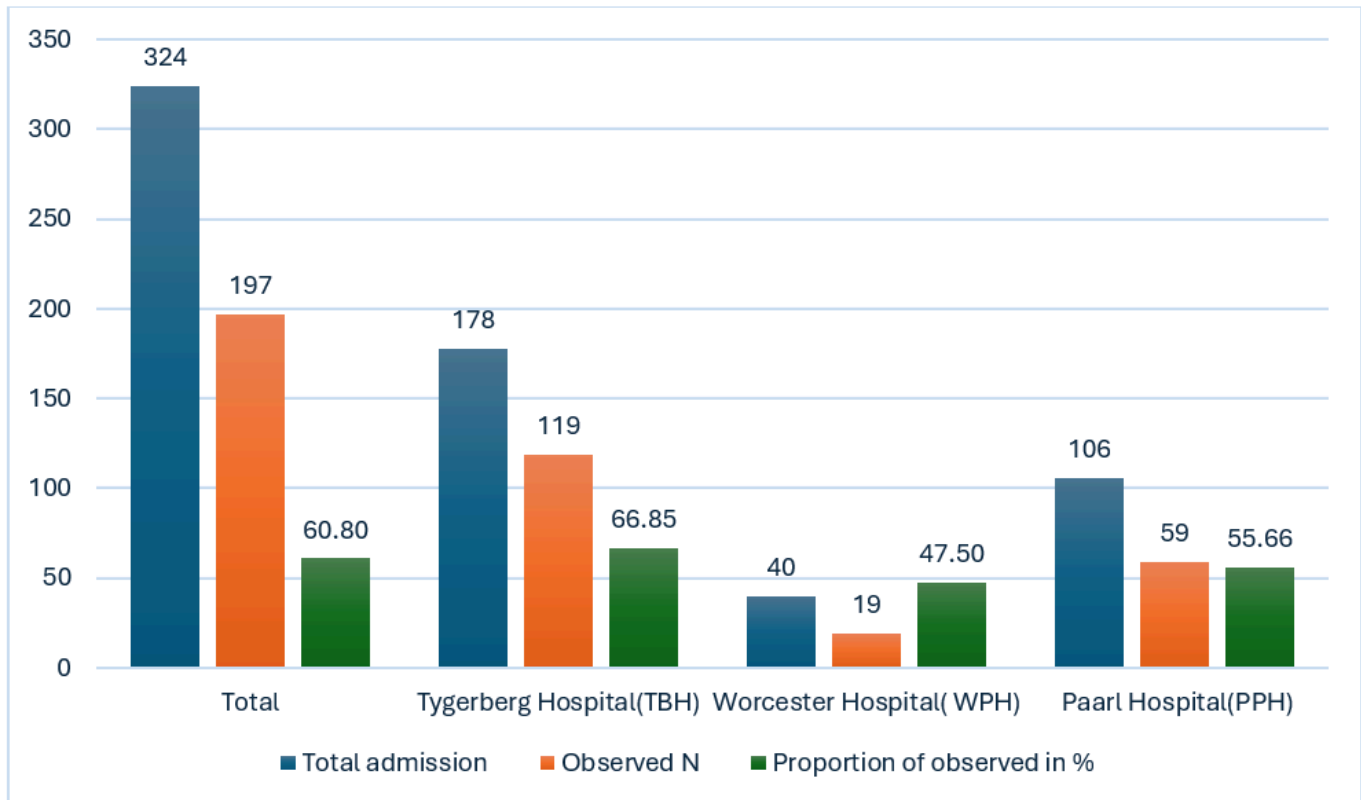


Figure 1

Infant admissions and number of infants observed sleeping by study site in postnatal wards at three hospitals in the Western Cape, 2026.