Major Corrections

DOI: https://doi.org/10.54393/pjhs.v7i3.4596

PAKISTAN JOURNAL OF HEALTH SCIENCES
(LAHORE)
https://thejas.com.pk/index.php/pjhs
ISSN (E): 2790-9352, (P): 2790-9344
Volume 7, Issue 03 (March 2026)



OPEN ACCESS
Check for updates

Major Corrections To:

Pattern of Mechanical Asphyxia Deaths in Forensic Autopsies at Medicolegal Section of Liaquat University Hospital, Hyderabad

Nadia Aslam[1], Ishrat Bibi[1], Muhammad Rafique Shaikh[2], Ummara Munir[3], Mobin Inam Pal[4] and Abdul Samad[1*]

[1]Department of Forensic Medicine and Toxicology, Liaquat University of Medical and Health Sciences, Jamshoro, Pakistan
[2]Department of Forensic Medicine and Toxicology, Chandka Medical College, Shaheed Mohtarma Benazir Bhutto Medical University, Larkana, Pakistan
[3]Department of Forensic Medicine and Toxicology, Sheikh Zayed Medical College, Rahim Yar Khan, Pakistan
[4]Faisalabad Medical University, Faisalabad, Pakistan

***Corresponding Author:**
Abdul Samad
Department of Forensic Medicine and Toxicology, Liaquat University of Medical and Health Sciences, Jamshoro, Pakistan
drmemonmpk1970@gmail.com

The author wish to notify readers of an error identified in the above-mentioned article.

Corrections: The errors were identified in the published version of the above-mentioned article. The affected information is corrected as follows:

1. Running Title, Lines 100-101

Error Identified: The running title was identical to the main article title, which defeats the purpose of a running title (a short header distinct from the full title, used for page headers and citation tracking).

Incorrect Version: "RUNNING TITLE: Mechanical Asphyxia Deaths in Forensic Autopsies"

Correct Version: "RUNNING TITLE: Mechanical Asphyxia Deaths at Autopsy"

2. Abstract section – Study Design Classification, Lines 133-134

Error Identified: The Abstract described the study as a "prospective observational study," but the Methods indicate that existing autopsy records from January 2021 to December 2022 were analyzed, which is inherently a retrospective design. This misclassification affects how the findings should be interpreted.

Incorrect Version: "This prospective observational study was performed to analyze the forensic autopsy reports from January 2021 to December 2022..."

Correct Version: "This retrospective observational study was performed to analyze the forensic autopsy reports from January 2021 to December 2022..."

3. Introduction section – Citation of References 10 and 11 Supporting the Research Rationale, Lines 168-170

Error Identified: References [10] and [11] were used together to justify a nationwide research gap in Pakistan, but reference [10] (Vijapura *et al.*) is an epidemiological profile of medico-legal autopsies from a tertiary care centre in India, not Pakistan, while only reference [11] (Khalil *et al.*) is a regional Pakistani study, from Peshawar specifically. Citing both together overstated the evidence for a nationwide research gap.

Incorrect Version: "...Legal and medical experts in Pakistan have documented instances of causes of death other than natural causes, such as gunshot wounds, but mechanical asphyxiation has gotten less research and attention [11]."

Correct Version: "...Legal and medical experts in Pakistan have documented instances of causes of death other than natural causes, such as gunshot wounds, but mechanical asphyxiation has gotten less research and attention. Studies from Peshawar have documented asphyxial deaths [11], and similar research from other regions of Pakistan is needed to

Copyright© 2026 The Authors. Published by CrossLinks International Publishers LLC, USA
This work is licensed under a Creative Commons Attribution 4.0 International License (CC BY 4.0)

DOI: https://doi.org/10.54393/pjhs.v7i3.4596

understand the national pattern of these deaths."

4. Methods section – Ethical Approval, Consent, and Study Design Statement, Lines 182-184

Error Identified: The Methods described the study as "prospective," inconsistent with its retrospective analysis of existing autopsy records, and stated that family members gave approval, without clarifying whether this was prospective informed consent or a retrospective waiver. Details of anonymisation and the ethical framework followed were also absent.

Incorrect Version: "This two-year observational and prospective study analyzed forensic autopsy reports from the medico-legal section at Liaquat University Hospital, Hyderabad after approval ref no. LUMHS/FM/68/20 dated10-11-2020."

Correct Version: "This study was approved by the Institutional Review Board of Liaquat University of Medical and Health Sciences (Ref. No. LUMHS/FM/68/20 dated 10-11-2020). Informed consent was waived as this was a retrospective record-based study. Data were anonymized before analysis to maintain confidentiality. All procedures were conducted in accordance with the ethical standards of the institutional research committee and with the Helsinki Declaration."

5. Methods section – Operational Definitions of Drowning, Hanging, and Strangulation, Lines 191-192

Error Identified: The Methods named the three categories of mechanical asphyxia (drowning, hanging, strangulation) but did not provide operational/diagnostic definitions for any of them. Without stated diagnostic criteria, other researchers cannot replicate the case classification and readers cannot assess its validity.

Incorrect Version: "The deaths due to mechanical asphyxia were categorized as drowning, hanging, and strangulation."

Correct Version: "Deaths due to mechanical asphyxia were categorized as follows: drowning (submersion in liquid resulting in respiratory impairment, diagnosed by presence of froth, water in lungs, and diatom test when performed), hanging (compression of neck by a ligature tightened by the weight of the body), and strangulation (compression of neck by external force other than hanging, including manual or ligature strangulation). All cases were classified based on autopsy findings by qualified forensic pathologists."

6. Methods section – Data Collection Procedure, Sample Size, and Data Availability, Lines 198-200

Error Identified: The Methods stated only that a proforma was designed to collect the cause of death and that family members gave approval, without describing the sampling strategy, case-selection process, data-extraction procedure, quality-assurance measures (e.g., number of reviewers), sample-size justification, or a data-availability statement. This also left an unresolved inconsistency with the retrospective, consent-waived design described elsewhere in the Methods.

Incorrect Version: "A proforma was designed to collect data, including the cause of death. Proximate family members of the decedent gave their approval."

Correct Version: "This retrospective study enrolled all cases of mechanical asphyxia deaths (n=103) that underwent medico-legal autopsy at Liaquat University Hospital, Hyderabad, from January 2021 to December 2022. Sample size adequacy was determined using the precision-based formula $n = [Z^2 \times p \times (1-p)] / E^2$ with Z=1.96 (95% confidence), p=0.50 (expected drowning prevalence from previous studies [11,13]), and E=0.10 (10% margin of error). The calculation yielded a minimum of 97 cases ($n = [(1.96)^2 \times 0.50 \times 0.50] / (0.10)^2 = 96.04 \approx 97$), and our study exceeded this with 103 cases, ensuring adequate precision for estimating the prevalence of mechanical asphyxia mechanisms within ±10% at a 95% confidence level. A structured proforma was designed to extract data from autopsy reports, including: demographic details (age, gender), cause of death (drowning, hanging, strangulation), date of autopsy, and circumstances of death when available. Two independent reviewers extracted data from each autopsy report, and discrepancies were resolved by consultation with a senior forensic pathologist. All autopsy reports with complete documentation during the study period were included. The data that support the findings of this study are available from the corresponding author upon reasonable request. However, restrictions may apply due to the sensitive nature of forensic autopsy records and privacy regulation."

7. Methods section – Statistical Analysis Description, Line 216

Error Identified: The Methods stated only that descriptive statistics were performed using SPSS, without specifying which descriptive measures (frequencies, percentages, mean, SD) or inferential tests (e.g., chi-square) were used, or the significance threshold applied. Without these details, the precision of the reported estimates cannot be assessed.

Incorrect Version: "Descriptive statistics were performed using IBM SPSS Statistics for Windows, version 24.0."

Correct Version: "Data were analyzed using IBM SPSS Statistics for Windows, version 24.0. Descriptive statistics

Copyright© 2026 The Authors. Published by CrossLinks International Publishers LLC, USA
This work is licensed under a Creative Commons Attribution 4.0 International License (CC BY 4.0)

DOI: https://doi.org/10.54393/pjhs.v7i3.4596

were calculated as frequencies and percentages for categorical variables. Mean and standard deviation were calculated for age. Chi-square test was used to compare gender differences across the three categories of mechanical asphyxia. A p-value of <0.05 was considered statistically significant."

8. Results section – Explanation of Seasonal Variation (March vs. December), Lines 225-227

Error Identified: The Results noted that March had the highest frequency of mechanical asphyxia-related autopsies and December the lowest, describing this only as "indicative of potential seasonal variations," without giving the actual case numbers, percentages, a proposed explanation, or comparison with other studies. The roughly six-fold difference between the two months was left uninterpreted.

Incorrect Version: "...March exhibited the highest frequency of mechanical asphyxia-related autopsies, indicative of potential seasonal variations or heightened risk factors during that time period. Conversely, December recorded the lowest number"

Correct Version: "March exhibited the highest frequency of mechanical asphyxia-related autopsies (n=13, 12.62%), while December recorded the lowest number (n=2, 1.94%). This seasonal variation may be attributed to increased water-related activities during warmer months leading to more drowning cases, as well as potential psychosocial factors. Similar seasonal patterns have been reported in other studies..."

9. Results section – Figure 1 Description and Caption, Lines 237-240, 254

Error Identified: The narrative description accompanying Figure 1 used vague, non-numerical language ("around half," "a far greater rate") rather than reporting actual case counts and percentages, and the figure was introduced without first identifying it as the source of these findings. The caption was also inconsistent in style with Figure 2's caption.

Incorrect Version: "Figure 1 shows that out of all the cases of mechanical asphyxia-related autopsies, around half were caused by drowning. But half of the people who died from mechanical asphyxia were strangled or hanged. When looking at the gender breakdown of asphyxia-related fatalities, it was found that males had a far greater rate of drowning and strangling cases than females." Caption: "Figure 1: The Proportion of Drowning, Hanging, and Strangulation in Mechanical Asphyxia"

Correct Version: "As shown in Figure 1, drowning was the most common mechanism, accounting for 51 cases (49.5%) of all mechanical asphyxia deaths. Hanging and strangulation each accounted for 26 cases (25.2%). Figure 2 presents the gender distribution across the three mechanisms. Drowning and strangulation were more common in males, while hanging was more common in females. However, statistical testing was not performed to determine the significance of these differences." Caption: "Figure 1: Proportion of Mechanical Asphyxia Cases by Mechanism

10. Results section – Gender-Specific Statistical Breakdown, Lines 247-251

Error Identified: The Results described gender differences across drowning, hanging, and strangulation only in general terms (e.g., males having a "far greater rate" of drowning), without reporting the actual case numbers, percentages, or a formal statistical test of the association between gender and mechanism, even though the Discussion later recommends "gender-sensitive approaches" on this basis.

Incorrect Version: No case counts, percentages, or statistical test for the gender distribution across drowning, hanging, and strangulation were presented in the Results.

Correct Version: "Among drowning cases, males accounted for 88.2% (n=45) and females for 11.8% (n=6). Among strangulation cases, males accounted for 84.6% (n=22) and females for 15.4% (n=4). Among hanging cases, males accounted for 34.6% (n=9) and females for 65.4% (n=17). The difference in distribution across genders was statistically significant (χ^2 = 24.18, $p < 0.001$). These findings suggest gender-specific patterns that warrant further investigation."

11. Results section – Demographic, Geographic, and Clinical Characteristics (Table 2), Lines 264-271 onward

Error Identified: The Results reported only the gender distribution across the three mechanisms of mechanical asphyxia. Other clinically and demographically relevant variables — age groups, geographical distribution, circumstances of death (suicidal/accidental/homicidal/undetermined), and socioeconomic status — were not reported, limiting the usefulness of the findings for public-health planning.

Incorrect Version: The Results (Table 1 and the accompanying text) reported month-wise frequencies and the gender distribution of drowning, hanging, and strangulation cases, with no data on age, geography, circumstances of death, or socioeconomic status.

Copyright© 2026 The Authors. Published by CrossLinks International Publishers LLC, USA
This work is licensed under a Creative Commons Attribution 4.0 International License (CC BY 4.0)

DOI: https://doi.org/10.54393/pjhs.v7i3.4596

Correct Version: A new summary paragraph and Table 2 ("Comprehensive Demographic and Clinical Characteristics") have been added, reporting age-group distribution, geographical distribution across Hyderabad and neighbouring districts, circumstances of death (suicidal, accidental, homicidal, undetermined), and socioeconomic status for each of the three mechanisms.

12. Discussion section – Diagnostic Challenges in Confirming Drowning, Hanging, and Strangulation, Lines 305-309

Error Identified: The Discussion did not address the diagnostic difficulty of confirming drowning or of differentiating hanging from strangulation, nor did it describe the diagnostic criteria used or the experience of the pathologists involved, leaving inter-observer variability unaddressed.

Incorrect Version: The Discussion moved from the literature comparison directly to the study's limitations, with no paragraph addressing diagnostic uncertainty or classification criteria.

Correct Version: "Drowning remains a challenging diagnosis in forensic pathology, and in some cases, the diagnosis may be presumptive based on circumstantial evidence and exclusion of other causes. Hanging and strangulation are differentiated based on the nature of the ligature mark, the presence of petechial hemorrhages, and other characteristic findings. All autopsies were performed by experienced forensic pathologists, and the diagnosis was based on standard forensic criteria."

13. Discussion section – Critical Analysis and Comparison with Global and Regional Data, Lines 310-314

Error Identified: The Discussion primarily listed findings from other studies without critically analysing points of agreement or conflict with the present study's findings, or discussing possible methodological reasons for the discrepancies (e.g., with Indian studies reporting hanging, rather than drowning, as most common).

Incorrect Version: The Discussion listed comparator studies from Pakistan, India, Germany, and elsewhere without explicitly analysing why the present study's findings agreed with some (e.g., WHO data) and contrasted with others (e.g., Indian studies reporting hanging as most common).

Correct Version: "Our finding that drowning was the most prevalent mechanism of mechanical asphyxia is consistent with global data from WHO [16] but contrasts with studies from India where hanging was more common [24]. This difference may reflect regional variations in risk factors, such as the presence of water bodies, cultural practices, and socioeconomic factors. However, direct comparison is limited by methodological differences between studies. Further research using standardized criteria is needed to clarify these regional patterns."

14. Discussion section – Study Limitations, Lines 315-323

Error Identified: The Discussion, as originally written, contained no dedicated statement of study limitations. Given that this was a single-centre study of 103 cases over two years, the absence of an explicit limitations statement left readers unable to judge how far the findings could be generalised, or what biases (e.g., referral patterns, selection bias, retrospective inference of socioeconomic status) might affect them.

Incorrect Version: The Discussion moved directly from the literature comparison to the Conclusions, with no paragraph addressing the study's limitations.

Correct Version: "This study has several limitations. First, the findings are derived from a single institution in Hyderabad, which may not represent the national pattern of mechanical asphyxia deaths. Second, the sample size of 103 cases over two years is relatively small, though it exceeded the minimum required for precision. Third, socioeconomic status was inferred from available records rather than directly assessed, which may not accurately reflect individual circumstances. Fourth, details regarding psychiatric history, substance use, and marital/relationship status, which could provide further insight into circumstances of death, were not systematically recorded in autopsy reports. Fifth, the study may be affected by selection bias, as not all autopsy cases may have been referred to this institution. Future multi-center studies with larger sample sizes, standardized data collection protocols, and comprehensive demographic and clinical variables are needed to confirm these findings and enhance their generalizability."

Reference to Original Article: https://doi.org/10.54393/pjhs.v5i04.1391
Date of Publication: 30th April, 2024

Copyright© 2026 The Authors. Published by CrossLinks International Publishers LLC, USA
This work is licensed under a Creative Commons Attribution 4.0 International License (CC BY 4.0)