# Supplementary File S1

# Data-Collection Instruments

**Study: The Dark Side of Nurse-Manager Leadership: Toxic Leadership Behaviours, Adverse-Event Reporting, and Care Quality—An Interpretive Descriptive Study.**

This supplementary file contains the study's participant information form, the semi-structured interview guide (15 items), the focus-group discussion protocol (with standardised vignettes), and the document-analysis extraction matrix.

## A. Participant Information Form (completed before interview/focus group)

Purpose: To describe sample characteristics and contextualise accounts (not to evaluate performance).

### A1. Eligibility and role

- Role: ☐ Staff nurse ☐ Nurse manager ☐ Quality officer
- Unit/Department: _____
- Employment status: ☐ Permanent ☐ Contract ☐ Other: _____
- Time in current hospital: ____ years ____ months
- Time in current unit/role: ____ years ____ months
- Shift pattern: ☐ Day ☐ Night ☐ Rotating

### A2. Demographic and professional profile

- Age (years): ____
- Gender: ☐ Female ☐ Male ☐ Prefer not to say ☐ Other: _____
- Nationality: _____
- Primary working language: ☐ Arabic ☐ English ☐ Other: _____
- Highest nursing qualification: ☐ Diploma ☐ BSc ☐ MSc ☐ PhD/Doctorate ☐ Other: _____
- Total nursing experience: ____ years

- Managerial experience (if applicable): ____ years

**A3. Exposure to adverse events and reporting (past 12 months)**

- Have you witnessed at least one event/near miss that could be reportable? ☐ Yes ☐ No ☐ Prefer not to say
- Approximately how many reportable events/near misses did you witness? ☐ 0 ☐ 1–2 ☐ 3–5 ☐ >5 ☐ Unsure
- How many incident reports did you personally submit? ☐ 0 ☐ 1–3 ☐ 4–6 ☐ >6 ☐ Prefer not to say
- Primary reporting route (if any): ☐ Electronic system ☐ Paper ☐ Verbal to manager ☐ Other: _____
- If you submitted none, main reason (select all that apply): ☐ No events ☐ Time/burden ☐ Fear of blame/retaliation ☐ Futility/no feedback ☐ Unsure what qualifies ☐ Other: _____

## B. Semi-Structured Interview Guide (15 core questions)

Administration notes: Conduct in a private setting; duration ~20–50 minutes. Offer Arabic/English; remind participants they may decline any question and may stop at any time.

**B0. Opening script (read verbatim)**

"Thank you for taking part. I'm interested in your experiences with nurse-manager leadership behaviours, how these affect adverse-event reporting, and how they connect to day-to-day care quality. There are no right or wrong answers. Please do not mention patient names or identifiable staff names. You can skip any question and stop the interview at any time. With your permission, I will audio-record so I don't miss anything."

**B1. Domain 1: Manifestations of toxic leadership behaviours (Destructive Leadership lens)**

1. In your unit, what behaviours from nurse managers make the work environment feel unsafe or threatening? Please describe what you have seen or experienced.
2. Can you recall a situation where a manager publicly blamed or humiliated a nurse? What happened, and how did it affect the team afterward?
3. Have you observed intimidation or threats (explicit or subtle) from managers? What forms did this take (e.g., evaluations, shifts, discipline)?
4. In what ways, if any, is information (updates, training opportunities, policy changes) withheld or 'gatekept'? What are the consequences?
5. Do you perceive favoritism or cultural/language bias in how nurses are treated? How does this shape who feels protected versus vulnerable?

**B2. Domain 2: Reporting intentions and decisions (Theory of Planned Behavior lens)**

6. Think of a time you considered reporting an adverse event or near miss. Walk me through how you decided whether to report.
7. Attitudes: What do you see as the benefits and risks of reporting in your setting? What makes reporting feel worthwhile—or not?
8. Subjective norms: What do colleagues and managers expect people to do when an incident happens? How are reporters viewed?
9. Perceived control: What makes it easy or difficult to submit a report (time, system usability, access, approvals, language)?
10. Fear and retaliation: What kinds of consequences do staff worry about after reporting (e.g., blame, workload changes, reputation, contract issues)?
11. Feedback and futility: What usually happens after a report is submitted? How does the presence/absence of feedback influence future reporting?
12. Managerial filtering: Are reports ever reviewed, modified, delayed, or discouraged before reaching quality/safety teams? How and when does this occur?

**B3. Domain 3: Perceived implications for care quality (Structure–Process–Outcome lens)**

13. How do leadership behaviours and the reporting climate shape day-to-day care processes (communication, escalation, teamwork, handover, documentation)?
14. Have you noticed ‘defensive’ practice patterns (e.g., avoidance of initiative, over-documentation, hesitation to escalate)? What drives them, and what do they cost?
15. Overall, how do these dynamics influence your perception of care quality and patient safety in your unit?

**B4. Role-specific probes (use selectively)**

Staff nurses – optional probes:

- When you choose not to report, what do you do instead (informal workaround, fix quietly, tell a colleague)?
- Which incidents feel ‘safe’ to report versus ‘dangerous’ to report—and why?
- How do nationality/contract status affect willingness to speak up?

Nurse managers – optional probes:

- How do you balance accountability with a ‘just culture’ approach after incidents?
- What pressures (targets, reputation, workload) shape how incidents are handled?
- What support do managers need to avoid blame-based responses and improve psychological safety?

Quality officers – optional probes:

- Where do you see bottlenecks or drop-offs in the reporting pathway?
- What patterns suggest under-reporting or selective reporting?
- How is feedback delivered, and what prevents transparent closure of reports?

**B5. Closing prompts**

- Is there anything important about leadership and reporting that we didn’t cover?
- What would a ‘safe’ reporting environment look like in your unit?

- If you could change three things tomorrow to improve reporting and care quality, what would they be?

## C. Focus-Group Discussion Protocol (non-managerial groups)

Design notes: Homogeneous groups of staff nurses. Duration ~40–75 minutes. Use vignettes to reduce personal disclosure risk and to surface shared norms.

### C0. Opening and ground rules (read verbatim)

"Thank you for joining. We will discuss leadership behaviours, reporting, and care quality using short scenarios. Please avoid naming individuals or patients. What's shared here stays here. You may pass on any question. Let's allow everyone a chance to speak, and we will disagree respectfully."

### C1. Warm-up (5–7 minutes)

- What does 'safe leadership' look like on a good day in your unit?
- Without naming anyone, what makes it hard for nurses to speak up in hierarchical environments?

### C2. Standardised vignettes (use 2–3 depending on time)

Vignette 1: Public blame

During rounds, a nurse manager criticises a staff nurse loudly in front of physicians and patients after a medication near miss is caught in time. Later, the team avoids discussing the incident, and no report is filed.

- What messages does the manager's behaviour send to the team?
- What would most nurses do next—and why?
- What would make reporting feel safer in this scenario?
- How might this affect escalation and communication later in the shift?

Vignette 2: Retaliation concerns and 'fix quietly' norm

A nurse notices a documentation error that could be reportable. Colleagues advise: “Fix it and move on—reporting only brings trouble.” The manager is known to remember ‘who reported’ and assign difficult shifts afterward.

- What are the informal rules about reporting in this situation?
- How do fear and job insecurity influence behaviour (especially for expatriate staff)?
- What organisational protections would change the decision?
- What are the patient-safety risks of normalised concealment?

Vignette 3: Gatekeeping, filtering, and weak feedback loops

A nurse submits an electronic incident report. Weeks pass without feedback. A colleague says the manager ‘revises’ reports before quality sees them, especially those that reflect poorly on the unit.

- How does lack of feedback shape future reporting?
- Where might the process be failing (system, workflow, accountability)?
- What would a transparent feedback loop look like?
- What should be the manager’s role in the reporting pathway (and what should not be)?

**C3. Group exercise: Mapping barriers and solutions (10–15 minutes)**

- As a group, list the top 5 barriers to reporting in your setting. Rank them from most to least influential.
- For each barrier, propose one realistic solution at the unit level and one at the organisational level.
- Identify ‘quick wins’ versus changes that require leadership/accountability reforms.

**C4. Closing and debrief (3–5 minutes)**

- What is the single most important change needed to make reporting psychologically safe?
- Is there anything you want to add privately after the group (optional one-to-one follow-up)?

## D. Document-Analysis Extraction Matrix (structured review)

Purpose: To triangulate participant accounts with formal organisational policies, workflows, and accountability signals.

### D1. Document identification

- Document title/code: _____
- Document type: ☐ Incident-reporting policy ☐ Reporting workflow/algorithm ☐ Quality improvement policy ☐ Leadership appraisal tool ☐ Unit dashboard/report ☐ Training material ☐ Other: _____
- Owner/department: _____
- Version/date: _____
- Applicable units: _____
- Confidentiality level/access restrictions: _____

### D2. Structured extraction fields (complete as applicable)

- Reporting pathway: steps from event → report → triage → investigation → closure; who sees what and when.
- Anonymity/protection: statements about confidentiality, non-punitive approach, anti-retaliation provisions.
- Manager involvement: required reviews/approvals; points where managers can delay/modify/filter.
- Feedback loop: timelines for acknowledgement, investigation updates, and closure communication to reporter/unit.
- Accountability: consequences for retaliation; escalation channels; whistleblowing or grievance pathways.
- Learning mechanisms: RCA triggers, lessons-learned dissemination, safety huddles, trend analysis.
- Indicators/metrics: what is measured (report volumes, types, closure times, unit comparisons) and how it is used.

- Equity considerations: language access, expatriate protections, training and communication requirements.

**D3. Donabedian mapping (optional, to support analysis)**

- Structure: governance, leadership appraisal, staffing, reporting infrastructure, protections.
- Process: reporting workflow, communication, escalation practices, feedback/closure processes.
- Outcome (proxy): stated quality indicators, safety culture targets, and learning dissemination.

## E. Mapping of prompts to the integrated framework and study objectives (analytic aid)

This mapping is used during analysis to ensure coverage across constructs while keeping coding inductive.

| Interview/FG content | Primary construct lens | Study objective(s) |
|---|---|---|
| **Humiliation, blame, intimidation, gatekeeping, favoritism (B1; V1)** | Destructive Leadership | Obj 1 |
| **Attitudes, norms, perceived control for reporting (B2; V2–V3)** | Theory of Planned Behavior | Obj 2 |
| **Filtering, bureaucracy, feedback loops (B2; V3; Document matrix)** | TPB + Structure factors | Obj 2 |
| **Defensive practice, escalation, teamwork, learning (B3)** | Structure–Process–Outcome | Obj 3 |
| **Hierarchy,** | Contextual moderators | Obj 2–3 |

| | | |
|---|---|---|
| **accountability, employment precarity, competing priorities (probes across guides)** | across lenses | |
| **Solutions and improvement strategies (FG exercise; closing prompts)** | Practice translation | All objectives |