

Poster 20

Under pressure leadership: ethical challenges and critical decisions in Forensic Science

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Abstract

Background: Leadership in forensic science is essential for ensuring the quality, ethical rigor and reliability of decisions relating to forensic investigations [1]. Forensic experts often encounter ethical dilemmas, institutional pressures, judicial expectations [2], as well as workplace-related factors (management, supervision, backlogs, high number of cases) or personal related factors (family, medical, financial) necessitating sensitive and highly responsible decision-making [3-5]. **Objective:** This work identifies and analyses forensic experts' main challenges when making critical decisions. **Methods:** The review was conducted following the PRISMA guideline and included a search of the PubMed, ScienceDirect, and IEEEExplore databases for articles published between 2020 and 2025. The search utilized keywords such as "forensic leadership", "ethical decision-making", "forensic science management", and "crisis response". Only peer-reviewed articles addressing leadership and decision-making issues in forensic contexts were included. Articles outside this timeframe or that did not meet the criteria of scientific rigor were excluded. **Results:** Of the 227 articles initially identified, 20 met the inclusion criteria, revealed a lack of formal leadership training among forensic professionals and highlighted ethical conflict management, institutional pressure, and effective communication as key competencies. These findings underscore the importance of collaborative leadership in crisis situations and when faced with controversial decisions. **Conclusions:** The results point out to an urgent need for leadership training within the forensic community (e.g., dedicated coursework, case-based learning, interdisciplinary projects, mentorship, workshops, internships, simulations, reflective assessments, and lectures from field experts) and communication and team management skills (e.g., clear communication protocols, leadership role designation, standardized reporting formats, regular cross-functional training and simulations, reliable communication technology, culture of trust and accountability, and crises debrief to improve future responses). Promoting informed and responsible leadership could enhance the integrity of forensic decisions and increase trust in the institutions that rely on these professionals.

Keywords: critical decision-making; professional ethics; team management

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