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Preparing for implementation: Identifying contextual factors influencing internal quality assurance in midwifery education in Bangladesh

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ABSTRACT

Background: High-quality maternal and newborn care relies on competent midwives, placing high demands on midwifery education. Continuous internal quality assurance is essential for meeting accreditation standards yet remains understudied, particularly in low- and middle-resource settings.
Aim: The aim of this study was to identify contextual factors preparing for implementation of an internal quality assurance process in midwifery education in Bangladesh.
Methods: A qualitative inductive design, guided by process evaluation principles for complex interventions. Data was collected through focus group discussions (n = 10) with a total of 76 midwifery faculty across Bangladesh. Transcribed discussions were analysed using qualitative content analysis.
Findings: This study identified several contextual factors that influence how systematic internal quality assurance is implemented in midwifery education: *governance and national leadership culture, institutional constraints* and *navigating individual engagement.*
Conclusion: Internal quality assurance in midwifery education requires more than technical tools. Trust-based leadership, psychological safety and integration into institutional routines and national policies are essential. Aligning national quality goals with local capacity and faculty values supports sustainable quality improvement in low- and middle-income settings.

Statement of Significance

Problem or Issue

Little is known about how contextual factors influence the implementation of a systematic approach to quality assurance in midwifery education institutions in low- and middle-income countries.

What is already known

A systematic approach to quality assurance is an essential part of higher education in high-income countries.

What this paper adds

This paper provides new empirical insights into the barriers,

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enablers, and unintended consequences shaping implementation of a systematic quality assurance approach in midwifery education institutions in Bangladesh, offering guidance for adaptation in other contexts.

1. Introduction

Quality care for women and newborns relies on competent midwives, making the quality of midwifery education a critical determinant of health outcomes [1]. Ensuring high-quality education requires not only the establishment of rigorous standards but also continuous quality improvement processes [2]. This underscores the importance of a systematic approach to quality assurance in midwifery education institutions [3,4]. To achieve sustainable improvements, it is necessary to understand the contextual factors that can shape the implementation of internal quality assurance, using Bangladesh as a case example.

Quality assurance in higher education refers to structured processes that ensure educational programmes meet agreed standards and remain responsive to changing need [5]. These processes include both external and internal mechanisms that together promote accountability, transparency and trust [2,5,6]. In midwifery education, the International Confederation of Midwives (ICM) global standards provide an internationally recognised benchmark for educational quality [2,7].

External quality assurance, such as accreditation, is typically conducted by independent and government-approved bodies that assess institutions against predefined criteria and provide recommendations for improvement [2,5,6,8–11]. Although empirical evidence on the direct effects of accreditation remains limited [11], it is widely endorsed by the World Health Organization and the ICM as a key mechanism for safeguarding educational quality in midwifery education [2,9–11]. Recent research suggests, however, that accreditation is most effective when combined with flexibility, continuous improvement and adaptation to local contexts [12]. In Bangladesh, accreditation structures exist [13,14], yet only a few midwifery education institutions have yet been accredited [12].

Internal quality assurance places responsibility for continuous quality improvement within education institutions themselves [2–4,6]. It includes activities such as self-assessment, monitoring and systematic programme development, which are well established in higher education systems in high-income countries [6,15,16]. Internal quality assurance can support institutional accountability and prepare programmes for external accreditation, while allowing for greater sensitivity to local conditions [5,6,8]. However, such approaches are rarely implemented in low-income countries between accreditation cycles [5,12]. In Bangladesh, a context-adapted systematic approach to internal quality assurance of midwifery education has recently been introduced, with support from the United Nations Population Fund (UNFPA), to strengthen institutional responsibility for continuous improvement [3,4].

The implementation of complex interventions, such as internal quality assurance systems, is strongly influenced by context. Context includes organisational structures, leadership practices, resource availability and professional norms. Understanding contextual factors helps to explain why interventions succeed in some settings but struggle in others. It also provides insight into how interventions can be adapted, scaled and sustained across different educational and cultural environments [17,18]. Despite the rapid expansion of midwifery education in Bangladesh, little is known about how contextual factors influence the implementation of systematic internal quality assurance processes. Addressing this gap is essential for strengthening midwifery education systems in Bangladesh, and in similar settings. Therefore, the aim of this study was to identify contextual factors influencing preparing for implementation of a systematic approach to internal quality assurance of midwifery education in Bangladesh.

2. Methods

2.1. Study design

A qualitative research design was used, enabling an in-depth understanding of how quality assurance interventions interact with the local context [17]. At the time of the study, 171 institutions provided midwifery education in Bangladesh. Of these, 31 institutions participated in the internal quality assurance project, and ten were purposively selected for inclusion in the study. Data were collected through semi-structured focus group discussions and analysed using content analysis [19]. A government order authorizing the implementation of the study among government-employed staff was issued in 2024 by the Directorate General of Nursing and Midwifery (DGNM), and ethical approval was granted from the National Ethical Committee in Sweden (D no: 2024–303 02510–01-583296).

2.2. Setting

Midwifery has been formally recognized as a distinct profession in Bangladesh since 2013, when the three-year Diploma in Midwifery was introduced [20–22], in collaboration with UNFPA. The programme has since expanded rapidly, with 171 institutions (62 public, 109 private) now offering midwifery education. There are approximately 200 national midwifery educators, most holding a PhD or master's degree in Sexual, Reproductive and Perinatal Health, Hospital Management, Women's Health, Nursing or Public Health. Each diploma programme enrols 25–50 students annually, drawing candidates from both rural and urban areas [14,20,22]. Oversight is provided by the Bangladesh Nursing and Midwifery Council (BNMC) and the DGNM, which jointly align programmes with ICM global education standards [2,7].

Notwithstanding these advancements, consistent quality remains elusive due to several systemic barriers. A critical shortage of faculty persists and essential initiatives, such as curriculum orientations, suffer from resource constraints. This situation is exacerbated by the increase of midwifery education institutions, in which most educators are nurse-midwives rather than being professional midwives [23]. Unfortunately, faculty preparation programmes [20,24] have struggled to keep up. This rapid expansion has led to inconsistent institutional standards and a lack of sufficient clinical mentorship for students [25,26], largely dependent on location and local accountability. Additionally, Bangladesh is a climate-vulnerable country where midwifery education systems are often disrupted by floods and other environmental challenges [27].

2.3. Intervention

The Government of Bangladesh, with technical and financial support from UNFPA and in co-design [28] with University of Gothenburg, initiated a project in 2023. The project aimed to develop and implement a systematic approach to internal quality assurance of midwifery education at 31 institutions in Bangladesh (18 public, 13 private) [4]. The initiative promotes continuous improvement of midwifery education through systematic self-assessments [29], using a contextually adapted quality assurance tool aligned with ICM global standards, to prepare institutions for accreditation. The preparation for implementation was supported by a DGNM-appointed quality assurance task force of trained midwifery educators (n = 21) representing the participating institutions. The task force was responsible for leading the preparation for implementation at the institutional level. The national project coordinator coordinated activities and communication between institutions, while the international research team provided technical support throughout the project [4].

2.4. Data collection and participants

In collaboration with the University of Gothenburg, 10 institutions

were purposively selected from the 31 that had been invited and included in the quality assurance project for midwifery education. The selection aimed to capture variation across institutions and was based on several factors, including self-assessment scores derived from the Quality Assurance Assessment Tool. Institutions representing high (n = 2), medium (n = 7), and low (n = 1) scores were included [4]. The final sample consisted of six public and four private institutions located in eight districts of Bangladesh, encompassing both rural and urban contexts. In total, all 76 faculty members involved in midwifery education who were invited to participate took part in 10 focus group discussions, each consisting of 3–11 participants. Additional characteristics are presented in Table 1.

Of the 76 participants 53 had previously been involved in the initial internal quality assurance activity at their respective institutions. Between November and December 2024 two researchers, one national and one international, conducted focus group discussions, serving as moderator and observer/translator. The national researcher was also involved in the activities of the quality assurance initiative. To minimise the potential influence of this dual role on data collection, an international researcher participated in all focus group discussions and all analytical decisions were discussed within the multidisciplinary research team. Due to political unrest, five of the discussions were conducted using a hybrid format, with one researcher physically present on site and the other participating remotely. The remaining five discussions were conducted with both researchers physically present. Participants received oral and written study information, with the opportunity to ask questions to the interviews in both English and Bengali and provided written informed consent. A semi-structured interview guide consisting of five open-ended questions was developed, pilot-tested and used to facilitate the focus group discussions. The guide explored participants' perceptions of contextual factors influencing the preparation for implementation of the internal quality assurance process. An example question was: *For internal factors, what do you think will make the process easy or hard to use at your institution?* The full interview guide is available in Appendix 1.

Participation was voluntary and uncompensated. Discussions, lasting 48–90 min, were audio-recorded and conducted in English and Bengali, with real-time translation into English by a research team member.

2.5. Data analysis

All data were transcribed into English and de-identified, coded and were analysed using inductive content analysis by Elo and Kyngäs [19], comprising three phases: preparation, organizing and reporting. In the preparation phase, the unit of analysis was defined and the text read repeatedly for overall understanding. The organizing was carried out in several steps. First, open coding was conducted, during which relevant parts of the transcribed texts linked to the aim were marked during multiple readings. The codes were then grouped in a separate document to identify patterns. Next, a categorization matrix was developed, where groups of codes were named as sub-categories and then merged into broader, generic categories through abstraction. All steps of the analysis were discussed repeatedly among the authors FB, KE, HW, MB and NIP. An example of the data analysis is presented in Table 2. In the reporting phase, the categories were described and illustrated with participant quotations. The other authors, as experts with contextual knowledge, supported the analysis by reviewing emerging categories, acting as peer debriefers, contributing to interpretive triangulation, and approved the final version.

Table 1
Characteristics of the participants in the focus group discussion.

Characteristic	**n / (%)** (total n = 76)
Gender	Female: n = 64 (84%) Male: n = 12 (16%)
Age (year)	Mean: 42.7 *(Range 23–72)*
Time in the profession (years)	Mean: 18.35 *(Range 10 months to 43 years)*
Tenure at current institutions (years)	Mean: 4.87 *(5 days to 20 years)*
Current profession (number)	Nursing instructors/lecturers: 60 Principals/vice principals: 8 Midwifery instructors: 2 Assistant professors: 2 Accountants/cashiers: 2 Computer operator: 1 Academic adviser: 1
Highest educational qualification (number)	Master's degree: 57 Bachelor of Science in Nursing: 11 PhD: 3 Diploma in midwifery: 2 Bachelors in management: 1 Higher Secondary Certificate: 1 No response: 1

3. Results

Contextual factors influencing the preparation for implementation of internal quality assurance in midwifery education in Bangladesh were organized into three generic categories, each with two to three sub-categories. An overview of the results is provided in the Fig. 1 below.

3.1. Governance and national leadership culture

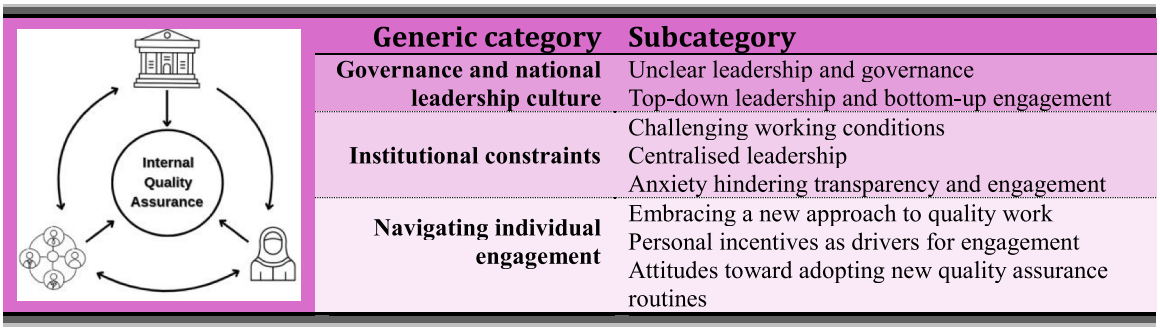
3.1.1. Unclear leadership and governance

Participants identified that midwifery education in Bangladesh is in a transformative phase of establishing standardized quality assurance. While recognizing the foundational support provided by the government, participants described how the implementation of internal quality assurance in midwifery education is influenced by leadership stability and clarity of governance. Although official authorities were seen as providing important support to educational institutes, frequent political and administrative changes were perceived to disrupt continuity and limit opportunities for long-term strategic planning. Participants noted that shifting directives were often introduced with limited institutional involvement, short preparation timelines and insufficient follow-up aligned with local educational contexts. This placed significant pressure on institutional leaders to meet externally set targets under challenging conditions, as reflected by one participant: *There is pressure from [the authorities] and others, fulfilling the target is very tough.* (FGD 4)

Private institution providers further reported a lack of access to funding mechanisms and national-level planning, despite their active role in delivering education. One participant underscored the need for more inclusive governance to foster sector-wide engagement and shared responsibility in quality assurance. *There are international organizations*

Table 2
Overview of an example of the data analysis process.

Unit of meaning	Sub-category	Generic category
This creates a big problem, this political changes. I hope this change may make something better but for this we are falling behind a little and it is now becoming time-consuming for us ***Frequent changes in the administration. Every day the table is changing, and the person is also changing.*** ***A lots of NGO of various kind of foreign policy makers already, made our DGNM and made already collaborative this our government, but the improvement is very slow,*** ***This should be the government rule.***	Unclear leadership and governance	**Governance and national leadership culture**



Generic category	Subcategory
Governance and national leadership culture	Unclear leadership and governance
	Top-down leadership and bottom-up engagement
Institutional constraints	Challenging working conditions
	Centralised leadership
	Anxiety hindering transparency and engagement
Navigating individual engagement	Embracing a new approach to quality work
	Personal incentives as drivers for engagement
	Attitudes toward adopting new quality assurance routines

Fig. 1. Overview of generic categories and subcategories.

providing funding to different projects. Can a private institution get the funds? (FGD 5)

In addition, the rationale behind the internal quality assurance process was questioned, particularly in contexts where institutional understanding of midwifery as a distinct profession, with its own curriculum and dedicated educators, was unclear or contested.

The reported variations in role clarity and oversight impacted the consistent application of quality standards in midwifery education. Participants noted that these structural challenges made it difficult to embed long-term initiatives, such as internal quality assurance, into the standard institutional culture.

3.1.2. Top-down leadership and bottom-up engagement

The implementation of internal quality assurance in midwifery education was influenced by a reliance on top-down governance. Participants described a system in which leadership was expected to come from state authorities, with limited openness to the kind of bottom-up engagement that the internal quality assurance process naturally requires. Many were accustomed to official monitoring visits from authorities, structured around checklists and guidelines, often culminating in recommendations. These visits were viewed as external drivers of institutional motivation, fostering a sense of competition and improved performance across institutions.

At the same time, participants expressed feeling pressured by the volume and urgency of top-down directives, frequently requiring their involvement in official activities at short notice. This pattern of urgent official demands disrupted their daily routines and compromised their ability to maintain educational quality. *Sometimes there is no instruction in advance. 'Hey, you …, you have to do that!' That is a commanding voice.* (FGD 6)

Faculty members also highlighted a perceived misalignment between national policy objectives and resources available at the institutional level. The alignment of resources, leadership support and institutional capacity was consistently described as critical for achieving quality benchmarks. Accounts also reflected an ongoing transition towards a more *bottom-up* approach to internal quality assurance. This transition involved reconciling traditional hierarchical governance structures alongside emerging expectations for shared responsibility, local leadership and institutional ownership embedded in the new quality frameworks. The shift was described as requiring considerable cultural and administrative adjustment within institutions.

3.2. Institutional constraints

3.2.1. Challenging working conditions

Faculty across institutions reported differing perceptions of their working conditions, reflecting notable disparities in institutional capacity. While a few institutions felt equipped to deliver high-quality midwifery education, others pointed to financial, infrastructural and resource constraints that hindered their ability to do so. In these settings, responsibility for addressing these challenges was often shifted upwards, with educators feeling powerless to initiate change at the institutional level. *We cannot manage this one, it is our Head of the Department. This is their [higher authorities'] problem.* (FGD 3)

A shared concern across all institutions was the shortage of qualified midwifery educators, compounded by a range of contributing factors. Educators cited frequent staff rotations, delays in salary disbursement, the attraction of alternative employment opportunities and expectations to support colleagues and students financially and practically, in addition to their teaching duties. These pressures led to high turnover and an ongoing shortage of trained educators.

Faculty members were frequently tasked with concurrently managing multiple courses and cohorts while also integrating internal quality assurance activities into their existing professional portfolios. Under such conditions, the feasibility of implementing a quality assurance process was called into question.

We need more than two teachers to be able to support this kind of activity [quality assurance activities]. Because there are two programmes in midwifery, a diploma midwifery and B.Sc. with 4–5 batches of students. (FGD 6)

In addition to their academic responsibilities, educators faced time-consuming demands from students and their families related to grading, housing, security, and stipends. These external pressures placed further demands on their time and energy, making it even more difficult to focus on or prioritize the quality assurance processes.

3.2.2. Centralised leadership

Institutional leadership in midwifery education was characterized by a centralized leadership model, where principals play a primary role in directing resource allocation and quality improvement initiatives. Participants noted that internal quality assurance activities were most effectively mobilized when aligned with leadership priorities. In this context, institutional development was often facilitated through concentrated engagement between the principal and senior faculty, reflecting a governance structure where strategic direction is initiated at the executive level.

In several settings, institutional coordination was characterized by centralized decision-making, with responsibilities concentrated among senior leadership. This model was often attributed to a strategic focus on senior-level oversight, based on the perception that leadership readiness is closely linked to professional tenure. Consequently, leadership was viewed as a quality that evolves through institutional experience, with less emphasis placed on formal competency-based development for early-career staff. *If you work hard, then by auto system [seniority] you will develop leadership qualities.* (FGD 4)

Within the existing centralized governance structure, oversight of quality assurance activities was largely concentrated at senior levels of leadership, with decision-making primarily situated at this level. This arrangement resulted in clearly differentiated roles between leadership and early-career staff and was described alongside limited delegation and a relatively low emphasis on supportive teamwork. Junior faculty reported having few opportunities to participate directly in strategic

planning and quality-related decision-making, which was associated with more cautious engagement and lower levels of self-initiated involvement in internal quality assurance activities.

In such environments, institutional leaders, rather than faculty collectively, were seen as the primary drivers of quality. This often led to either passive acceptance or compliance-driven engagement in quality assurance processes. One participant highlighted how leadership styles shaped the extent and nature of staff involvement in these efforts. *Our principal gave us guideline how we could do it.* (FGD 2)

3.2.3. Anxiety hindering transparency and engagement

Participants expressed a sense of anxiety about how internal quality assurance findings might reflect on their institutions. There was a widespread concern that acknowledging weaknesses or gaps in educational quality would be interpreted as a sign of incompetence or lack of professionalism. Such perceptions were feared to potentially harm the institution's reputation both nationally and internationally.

> *If we give lower points [in the quality assurance assessment tool], then what will [our higher authority] say? This may cause problem at national level. (FGD 7)*

This concern led some institutions to approach the internal quality assurance process with caution, opting to test it on a small scale to explore its potential benefits while minimizing perceived reputational risk. Others, however, were more reluctant to engage at all, fearing that documented shortcomings could trigger disciplinary consequences. These anxieties created pressure to present an image of institutional flawlessness, even when internal challenges were widely recognized.

As a result, transparency and openness, key principles in effective quality assurance, were often compromised. Educators described feeling personally responsible for institutional gaps, even when such issues were beyond their control.

> *I must represent the findings [disclosed in the quality assurance tool]. I [as faculty] need to take the blame, as again this is our institutional gap which is not controlled by us [faculty] and our authority [principal]. This can be solved only by [our national level higher authorities]. (FGD 6)*

These concerns regarding external perception influenced the depth of the self-assessment process and collective learning. As a result, the potential for internal quality assurance to drive institutional development was moderated by a cautious approach to documenting challenges and administrative gaps.

3.3. Navigating individual engagement

3.3.1. Embracing a new approach to quality work

For many faculty members, the internal quality assurance process represented a new way of working. While some participants realized that aspects of quality assurance had previously been addressed informally, the structured process brought new awareness and clarity to their efforts. Faculty recognized that this new approach not only strengthened their capacity to improve educational quality but also encouraged a shift toward continuous and systematic improvement.

However, this potential could only be realized if they were able to move beyond concerns for institutional reputation and understand that the internal process was an internal tool, meant for self-improvement rather than external appraisal. *Because if we do not identify the problem in each area [of the quality assurance assessment tool], then we cannot solve the problem.* (FGD 3)

Participants also began to appreciate the value of adopting a more inclusive and reflective mindset. Involving students and clinical staff in the quality assurance process was seen as an opportunity to gain deeper insight into areas in need of improvement and as an avenue to building a culture of collaboration and shared responsibility. This shift in perspective signalled a growing understanding that quality assurance is not merely a compliance activity, but a meaningful tool for learning and growth.

Importantly, adaptability to the internal quality assurance process was viewed as relevant beyond the context of midwifery education at a single institution. Participants expressed hope that the approach could contribute to strengthening national accreditation systems and shaping broader standards for healthcare education in Bangladesh.

3.3.2. Personal incentives as drivers for engagement

Among some faculty members, motivation to engage in the internal quality assurance process was shaped more by individual benefits than by a shared commitment to the overall improvement of midwifery education. While some participants saw the value of quality assurance from an institutional or educational perspective, others were more inclined to participate if tangible personal or professional gains were perceived.

The implementation of quality assurance was perceived by some participants as an additional requirement on top of an already high workload. Faculties identified the need to balance these new mandates with existing teaching and administrative commitments. As such, the willingness to engage was often conditional on whether the process would result in concrete advantages, such as recognition, incentives or increased institutional support.

> *The teachers will be more attentive if they get benefits. They have so many other things to do and this [the quality assurance work] is something additional on them, and if you [the researchers] want to improve this situation, I think it would be better for all of us. (FGD 6)*

3.3.3. Attitudes toward adopting new quality assurance routines

The introduction of the internal quality assurance process elicited mixed reactions among faculty, revealing differing levels of readiness and willingness to adopt new routines. Some participants expressed a positive attitude, viewing the process as relevant, practical and ultimately supportive of institutional goals. This openness was closely tied to the availability of clear instructions and supportive leadership. When such enabling conditions were present, the process was seen as a valuable tool for fostering ongoing improvements in education. As one participant shared: *This was a challenge [the quality assurance process], we couldn't understand unless our principal helped us, and then we understood.* (FGD 1)

Other responded with hesitation or scepticism. Some faculty members perceived the process as time-consuming, unclear and difficult to integrate into their already demanding schedules. They questioned their own ability to implement new routines, particularly in the absence of sufficient training or guidance. For some, the internal quality assurance process appeared to be less of a mechanism for internal reflection and more of an external monitoring tool imposed by higher authorities. In some cases, the view was expressed that acknowledging problems could create more work, thus making the process feel unnecessary.

A perceived gap in the synchronization of information between central authorities and educational institutes was noted, influencing early implementation. Strengthening the dissemination of information from central administrative bodies would help establish a more unified understanding of the initiative's goals, thereby reducing the administrative uncertainty reported at the local level. Establishing a common conceptual foundation was identified as a key facilitator for sustained engagement:

> *Three H: head, heart, hand. First knowledge, then attitude, then practice. It should be continuing practice in the work, not only one day. No, continue all the year around, for sustainability. (FGD 8)*

4. Discussion

This study identified multiple contextual factors influencing the preparation for implementation of a systematic approach to the internal

quality assurance process in midwifery education in Bangladesh. These factors, *governance and national leadership culture*, *institutional constraints*, and *navigating individual engagement*, reflect complex interactions between external structures, organizational settings and personal motivation. To understand how these factors influence preparation for implementation, our findings are discussed through the lens of the Consolidated Framework for Implementation Research (CFIR) [30]. This theoretical framework is used to systematically analyse factors influencing the implementation of complex interventions across different contexts. It can also support the identification of general lessons that may be relevant for similar educational contexts and has been evaluated and further developed for use in low- and middle-income countries, making the framework particularly relevant in this context. The CFIR domains that will be in focus are *outer setting, inner setting,* and *individuals* [30,31].

The *Outer setting* refers to external contextual factors that influence implementation, such as national guidelines and relationships with external actors. Consistent with the outer setting [30] and previous research [13,32,33], our findings show that external support from national authorities and international organisations, including those government departments with a remit for midwifery, and relevant UN or other international agencies, can promote the implementation of quality assurance in midwifery institutions. However, this support is effective only when it strengthens ownership by national authorities and when quality assurance in education is integrated into relevant policies and directives. As a next step, these policies and directives can be systematically implemented at the institutional level to strengthen internal capacity for quality assurance work [4,33]. The implementation of quality assurance within midwifery education also benefits from coordinated collaboration, in which time-limited or project-based initiatives can contribute to long-term capacity development for quality improvement [32,34].

The *Inner setting* refers to the organizational conditions in which implementation takes place. This domain highlights the importance of a supportive implementation climate, including inclusive leadership, clear communication, accountability and trust among employees [30]. In line with this, faculty members in our study emphasized the value of a stepwise implementation of the internal quality assurance process, to strengthen the implementation climate and support the sustainability of quality improvement efforts. However, faculty also described demanding working conditions within educational institutions, which were experienced as important challenges for implementation. These included a shortage of educators and high workloads, circumstances that have also been noted in previous research [21,24,33]. Prior research further indicates that effective implementation requires sufficient time and enabling conditions to carry out new practices [35]. Therefore, integrating quality assurance into the daily work of education institutions may help embed quality assurance within organisational routines and foster a sustainable culture of quality improvement [11].

The leadership culture at the education institutions in this study played a role in how quality work was accepted among staff. The centralised leadership model with high staff turnover limited faculties' sense of responsibility to quality assurance work. Previous research indicates that leadership approaches which promote participation, continuity and shared responsibility strengthen the conditions for sustainable quality improvement [6,36]. Moreover, transparent and trust-based workplace cultures are essential for identifying areas in need of improvement [37]. Similar findings have been reported in other low- and middle-income settings, where supportive leadership, faculty continuity and strong institutional ownership were critical for faculty engagement and sustainable quality improvement in midwifery education [38,39]. In contrast, hierarchical or centralised leadership cultures within higher education have been shown to limit innovation and collective learning [33]. Findings related to the *inner setting* underscore that a positive implementation climate requires active leadership engagement and collegial responsibility.

In addition, our findings revealed faculty members' concern for negative consequences, if disclosing shortcomings that could potentially damage their institution's reputation. This concern reduced transparency and limited improvement-oriented practices, which is consistent with findings from previous studies [11,12,36,40]. Similar research shows that a lack of transparency constrains opportunities for shared reflection and collective learning, thereby undermining quality improvement efforts [40]. Other studies further emphasize that open reflection on shortcomings is a prerequisite for sustaining continuous improvement processes [39,40]. In line with this evidence, the CFIR framework highlights that successful implementation depends on a supportive environment characterized by psychological safety and open communication [30]. Taken together, these findings reinforce the importance of fostering a trust-based implementation climate, in which transparent leadership and collective faculty engagement support continuous quality improvement in midwifery education.

The *individual's* domain in the CFIR framework addresses both individuals' roles in the implementation process and their personal characteristics, including needs, knowledge, opportunities and motivation [30]. Faculty who perceived quality assurance as relevant to institutional development demonstrated higher levels of engagement, whereas those with more negative attitudes were less involved. These negative perceptions were often associated with unclear communication and limited exposure to systematic quality assurance processes which reduced understanding and, in turn, engagement. Previous research similarly shows that quality improvement initiatives are more effective when they align with individual values and the local context [11,40]. When faculty members understand not only how quality assurance is conducted but also why it is important, their motivation and sense of purpose are strengthened. This aligns with the CFIR individual domain, which identifies individual beliefs and motivation as critical determinants of successful implementation [30]. Consequently, designing quality assurance work in ways that align with faculty values and experiences is central, as these factors strongly influence implementation success.

While previous studies have identified leadership, organisational readiness and resource constraints as important factors influencing quality assurance implementation [37,41]. This study extends existing knowledge by showing how internal quality assurance in Bangladesh midwifery education is shaped by the interaction between hierarchical governance structures and a quality assurance approach based on shared responsibility, faculty engagement and continuous learning. Hence, using the Quality Assurance Implementation Guide [42] into routine practice support the stepwise implementation approach.

4.1. Strength and limitations

A strength of the study was the participation of a diverse range of faculty members, including principals, which provided a broad and nuanced understanding of the implementation process. Reliability was enhanced through the application of qualitative rigor strategies and a research team that combined international expertise with deep local contextual knowledge. The national project coordinator, who was involved in the preparing for implementation of the quality assurance initiative, also participated in data collection. This may have influenced participants' responses. To reduce this risk, an international researcher was present during all focus group discussions, and all analytical decisions were discussed within the multidisciplinary research team. Furthermore, conducting the study within the real implementation environment in Bangladesh strengthened the contextual relevance and supported transferability.

Some focus group discussions were conducted digitally, which limited the ability to observe nonverbal cues and for the international researchers to develop familiarity with the institutional context. This may have influenced the extent to which participants felt comfortable expressing their views openly. Language barriers may have influenced

both expression and interpretation. In addition, the centralised academic culture in Bangladesh may have shaped participants' responses, particularly for junior faculty when discussing issues related to senior colleagues. Because principals and junior faculty participated in the same focus group discussions, hierarchical relationships may have influenced the willingness of some participants to express critical views.

Future research should examine how faculty capacity-building and change management strategies influence the long-term implementation of quality assurance in midwifery education. Longitudinal studies are also needed to explore how organisational culture, faculty engagement and quality assurance practices evolve over time.

5. Conclusion

This study demonstrates that preparing for successful implementation of internal quality assurance in midwifery education depends on coordinated action across multiple levels of the education system. Governance and national leadership set the direction, but institutional conditions and leadership culture determine whether quality assurance becomes embedded in everyday practice. Centralised or hierarchical leadership, unclear communication and concern for reputational risk undermine transparency, shared responsibility and learning. In contrast, supportive leadership, faculty continuity and alignment with professional values enable engagement and sustainability.

These findings highlight that internal quality assurance cannot function as a stand-alone technical tool. Instead, it must be supported by trust-based leadership, psychological safety and clear integration into institutional routines and national policies. The findings suggest that long-term success depends not only on introducing quality assurance procedures, but also on supporting a gradual cultural shift from externally driven compliance towards shared responsibility for continuous improvement.

CRediT authorship contribution statement

FB: Formal analysis, Methodology, Project administration, Writing - original draft and Writing- review and editing. **KE:** Formal analysis, Methodology, Project administration, Writing - original draft and Writing- review and editing. **NIP:** Formal analysis, National project administration Writing - original draft and Writing- review and editing. **HW:** Formal analysis, Writing - original draft and Writing- review and editing. **JK:** Formal analysis, Writing - original draft and Writing- review and editing. **PR:** Writing - review and editing. **RB:** Writing - review and editing. **PJ:** Writing - review and editing. **MB:** Formal analysis, Methodology, Project administration, Writing - original draft and Writing-review and editing. All authors contributed substantially to the text. All authors have approved the final version of the manuscript and have given consent for publication.

Ethical declaration

Ethical approval was obtained from the National Ethical Committee in Sweden (D no: 2024–303 02510–01-583296). In Bangladesh, the Directorate General of Nursing and Midwifery Services issued an official government order authorizing both the workshop and the focus group discussion (DGNM, 2024). The study was conducted in accordance with national ethical regulations, the World Health Organization's International Ethical Guidelines for Health-related Research Involving Humans, and the ethical principles of the Declaration of Helsinki (2025). Participation was voluntary and uncompensated. All participants received oral (both in English and Bengali) and written information about the study's objectives, procedures, data use, publication, and their right to withdraw from the discussion at any time without consequences. Written informed consent, including consent for publication, was obtained in line with applicable regulations. All data were handled confidentially and stored securely. Identifying information was coded and not shared with the co-authors, ensuring that participants could not be identified during either the analysis or the reporting of the results.

Declaration of Generative AI and AI-assisted technologies in the writing process

AI not used in the preparation of this work.

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Declaration of Competing Interest

The authors have no competing interests to declare. They report no financial or personal relationships, including employment, consultancies, stock ownership, honoraria, paid expert testimony, patents, or funding, within the three years prior to the commencement of this work that could have influenced the study. All authors abide by the copyright terms and conditions of Elsevier and the Australian College of Midwives. Any opinions expressed in this document are those of the authors and do not necessarily reflect the views of UNFPA.

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Appendix A. Supporting information

Supplementary data associated with this article can be found in the online version at doi:10.1016/j.wombi.2026.102405.

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