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Findings from a context specific accreditation assessment at 38 public midwifery education institutions in Bangladesh

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ABSTRACT

Background: In order to promote sustainable midwifery education, it is important to understand what the structural shortcomings are. In this study of 38 public nursing institutions in Bangladesh, we aim to identify a number of structural shortcomings and to discuss strategies for limiting them.

Methods: An evaluated context-specific accreditation assessment tool consisting of 37 multi-choice closed-response questions encompassing 14 educational standards aligned with international standards for midwifery education programs and competences for midwifery educators was used to assess all public nursing institutions in Bangladesh (n = 38), the results of which are presented in simple descriptive statistics; number (n), percentage (%), mean, SD and minimum-maximum value.

Results: Provision around clinical practice sites is the key structural shortcoming within the Bangladeshi midwifery educational system. Twenty-five percent of the institutions provided no opportunity for midwifery students to practice comprehensive sexual and reproductive health care. Twenty-nine per cent of the clinical sites were not aware of the content of midwifery courses and syllabi. Finally, one third of students achieving a midwifery qualification did not meet the learning outcomes to support women in birth.

Conclusions: To measure progress towards national and global milestones to ensure students are equipped with required competencies before graduating as registered midwives will be difficult to meet unless shortcomings within the educational system are addressed. We recommend (i) the inclusion of clinical placement sites in future assessments, (ii) the introduction of an integrated feedback-appeal-response system, and (iii) the development of a system for improved communication links between educational institutions and clinical placement sites.

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Statement of significance

Problem or issue

There is an inconsistency globally in midwifery education programs in terms of the educational requirements, resources,

facilities, services, and assessment strategies needed to guarantee quality in midwifery educational programs.

What is already known

In Bangladesh, midwifery education informed by global standards exists, but there was no education accreditation system for affirming high quality midwifery education until a context specific accreditation assessment tool was developed and pilot tested in 2017.

What this paper adds

A context-specific accreditation assessment tool can be used as a benchmark from which to measure progress towards

Abbreviations: BNMC, Bangladesh Nursing and Midwifery Council; DGNM, Director General of Nursing and Midwifery; ICM, International Confederation of Midwives; SRH, Sexual and Reproductive Health; UNFPA, United Nations Population Fund; WHO, World Health Organization.

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national and global milestones to ensure that students obtain required competences before graduating as registered midwives.

Background

Healthy lives and quality education are two of the most important Agenda 2030 sustainable development goals [1]. This requires a transformative up-scaling of the midwifery education program in many low-and middle income countries so that the quantity of a local midwives is increased, their quality is improved and the country's health system and its sexual, reproductive, maternal and newborn health outcomes are strengthened [2]. However, supporting an educational system that can produce high quality midwifery care is a serious challenge for many countries, especially those where economic and educational resources are scarce [3].

Since the start of the three-year direct entry midwifery education programme at diploma level in 2013, more than 3000 midwives have graduated in Bangladesh. These midwives are deployed at a secondary care level and in humanitarian settings, and are providing care during pregnancy, labour and birth and the period after [4]. Bangladesh, with a current maternal mortality ratio of 173 per 100,000 live births and a neonatal mortality ratio of 17.1 per 1000 live births [5], has hence in recent decades rapidly scaled up its midwifery education system [4,6], increased its midwifery educator capability [7–9], improved students' job preparedness [10] and integrated midwives into the wider healthcare system [11]. All of this was done to meet the sexual and reproductive, maternal and newborn health needs of the country and to reach international health goals set by the UN. As a further step in this development process, in 2017 Bangladesh introduced a context-specific accreditation tool for accrediting midwifery education programs that met international quality standards [12].

Across the world, midwifery education programs vary widely in terms of their educational requirements, facilities, services and assessment strategies [13–15]. A key quality marker for a midwifery education program is its adoption of the ICM Global Standards for Midwifery Education [16] and the WHO's Midwifery Educator Core Competencies [17]. One strategy to ensure midwifery education meets these international standards is to promote the accreditation of midwifery programs which adopt them. Advice from ICM and WHO suggests using the momentum which has led to the adoption of an accreditation system to push for quality improvements in the educational institutions that teach midwifery. Ideally, this should be done alongside the introduction of accreditation guidelines [18–20].

Strong midwifery institutions are essential. They need to have an effective infrastructure which can support quality midwifery teaching. Where such institutions are weak, or failing, they themselves need to be supported so they can improve the competencies of staff, increase staff numbers, reform admissions criteria, and in general, strengthen students' competencies through a revised and updated curriculum [19]. This is critical work: maternal healthcare systems depend on properly educated midwives with the appropriate competencies who can provide high standards of safe, evidence-based care.

In order to promote quality improvements in weak or struggling midwifery education institutions it is of critical importance to understand what their structural shortcomings are and how they can best be addressed. Action to improve performance should then be taken, with an opportunity for re-assessment after a set period. In this study of 38 nursing colleges/institutes in Bangladesh, in

order to sustain midwifery education, we aim to identify a number of structural shortcomings that are indicative of the issues that many midwifery education institutions in many low-and middle income countries face. We used an evaluated context-specific accreditation tool to measure the performance across several areas. This assessment took place during the development of national accreditation standards and during the development of the ICM accreditation guidelines [19].

Method

Study design and settings

This study was conducted between March and June 2018. A cross-sectional assessment of nursing colleges/institutes where midwifery education programs are taught, in each of the eight geographical divisions in Bangladesh, was carried out using data taken from an accreditation questionnaire developed as part of a midwifery accreditation program introduced in 2017. To ensure full coverage of educational provision across the country, all of the 38 public educational institutions in Bangladesh were included in this study. Because the accreditation questionnaire (which is described elsewhere as an accreditation 'tool') was designed according to international midwifery educational standards and educators' competences [16,17] it formed a quality baseline against which the Bangladeshi midwifery education programs could be measured. Ethical clearance was obtained from the Ethical Review Committee: Centre for Injury Prevention and Research, Bangladesh, CIPRB/ER/2018/12.

The Bangladesh midwifery education system is centralized and falls under the authority of the Directorate General of Nursing and Midwifery (DGNM) and the Bangladesh Nursing and Midwifery Council (BNMC). The DGNM is responsible for the recruitment and deployment of educators and students while the Council develops and approves teaching curricula for midwifery programs. The Council also validates public and private colleges/nursing institutes and provides for the registration, licensing and licensing renewal of midwives. Nursing colleges in Bangladesh generally offer a three-year midwifery education program that leads to a diploma in midwifery. These colleges are located at the district level and are usually attached to tertiary hospitals that receive a high level of referrals from the primary level. A nursing institute is situated at the district level and is affiliated with general hospitals. The term institution refers to both nursing colleges and nursing institutes. The number of educational institutions and graduates in Bangladesh has grown rapidly in the past decade and there is now a large midwifery education sector. The educational institutions, with their increasing number of residential students, act as economical hubs offering deployment opportunities to the future midwives [21].

The context-specific accreditation assessment tool

Using a participatory consensus-building approach, a working group of senior government officials, national and international academics and the Bangladesh Midwifery Society, developed a set of 14 accreditation standards for midwifery education in Bangladesh aimed at improving the quality of midwifery education. These standards, along with an assessment tool for the accreditation of midwifery institutions and programs, were endorsed and approved for use in 2018 by the DGNM and BNMC. The accreditation assessment tool was developed using the ICM Global Standards for Midwifery Education [16] and the WHO's Midwifery Educator core competencies [17] and contextualized for the Bangladeshi setting. The tool comprises a structured questionnaire with 37 multiple-choice closed-response questions structured into five areas: organization and administration; midwifery

faculty; student body; assessment strategies; and, curriculum. Institutions are expected to achieve a minimum standard in each area in order to gain official accreditation for their midwifery program. The development, content and piloting of this assessment tool has been described in detail elsewhere [12].

Data collection and participants

In 2018, two non-Bangladeshi midwives and researchers with advanced knowledge and experience of the midwifery education system in Bangladesh trained 10 Bangladeshi midwifery educators in the use of the context-specific accreditation tool. The training consisted of an orientation session and instruction in one-day data collection methods and processes. All of the educators had been part of the accreditation tool's development process, so were familiar with its objectives and content. During the training these educators were able to discuss issues, practice interview and assessment techniques, acquire data collection skills and receive feedback on their performance. Once completed, the educators were grouped into five assessment teams, each comprising two assessors'. Each assessment team was given a weekly schedule of assessments that needed to be completed over a three-month period.

The data collection was approved by the DGNM, BNMC and Principals at all institutions. All participants were given verbal information about the study and their rights, such as the right to refrain from answering a question or to discontinue without explanation at any time.

Data were collected at all (n = 38) public midwifery educational institutions that offered the 3-year midwifery education program between February and July 2018. The assessment team visited each institution on their list and, during a face to face meeting with representatives from the institutions, completed the accreditation questionnaire. These representatives usually comprised a group of 4–10 midwifery educators and clinical preceptors. It was considered preferable to adopt this group survey approach, rather than completing the questionnaire with an individual college member, in order to avoid the possibility of missing or conflicting information from within the same institution. The answers were completed in English, but discussions around these were held in the local language. The assessment visit ended with a tour of the midwifery institution. Characteristics of the participants are illustrated in Table 1.

Table 1
Characteristics of participants (n = 256) n (%).

Gender	Female	255 (996%)
	Male	1 (0,4%)
Age	Range	35–59
	Mean	50
	Designation	Nursing Instructor/Educator 165 (64%)
Academic qualification	Nursing Instructor in charge	11 (4%)
	Principal	8 (3%)
	Senior Staff Nurse	49 (19%)
	Nursing Supervisor	11 (4%)
	Nursing Superintendent	12 (5%)
	PhD	1 (0,4%)
	Masters'degree in Public Health/Sexual, Reproductive and Perinatal Health/Nursing and Midwifery	205 (80%)
Number of working experience	Bachelor degree Nursing/Public Health	29 (11%)
	Diploma in Nursing and Midwifery	21 (8%)
	Range, year	0–38
	Mean, year	246

Data analysis

Descriptive analyses were computed for the background variables relating to age, designation, degree and number. Descriptive statistics were number (n=), percentage (%), mean, SD, and minimum and maximum value. Other variables were related to the five competence areas with possible responses as Yes or No with two lines for open text entries. The analyses were carried out using Excel software™. All the data were entered and stored in a password-protected database to facilitate confidentiality and consistent analysis by the first and last authors.

Results

Characteristics of institutions delivering midwifery education programs

Thirty-eight institutions participated in the survey: 27 (71%) were nursing institutes while nursing colleges are 11 (29%). Taken together, these institutions had a combined student body of 8544, giving each institution on average 224.8 students. The total number of students studying midwifery was 2849, or an average of 75 students per institution. The total number of educators teaching midwifery courses was 387, giving an average of 11.7 midwifery teachers at each institution at 33 reporting institutions.

Assessment findings

The findings from the assessment are presented using the six midwifery educator competency domains as defined by the WHO [17] (Fig. 1).

1. Ethical and legal principles of midwifery

Competency domain 1: Midwifery educators incorporate and promote ethical and legal aspects of midwifery care in teaching/learning activities and by considering role modeling.

Area 1) organization and administration

The ethical and legal principles of midwifery and the role modeling of these was an important feature in the organization and administration of the majority of Bangladeshi midwifery institutions. All 38 institutions (100%) stated that they implemented these principles, from their recruitment of students, through their retention and deployment processes and throughout their overall approach. Twenty-five (66%) of the 38 institutions reported that those involved in the admissions process had received some training in recruitment and selection. Of these 25 institutions a further 14 (56%) reported that their midwifery educators had received training in:

- planning for recruitment and selection
- assessing and determining shortlisting and selection criteria and
- monitoring the effectiveness of selection processes.

For the remaining 11 (44%) institutions, educators had received training in one or two of the three procedures.

The principal and/or nursing instructors carried out selection processes. Thirteen (34%) institutions had a clear admissions policy and six (16%) had clear entry guidelines that outlined linked employment opportunities upon graduation. Twenty-three (61%) institutions required prospective students to write a text in English and 12 (32%) institutions a text in Bangla. A majority of institutions (23, or 61%) made it clear on entry that midwifery students had a government employment after their graduation.

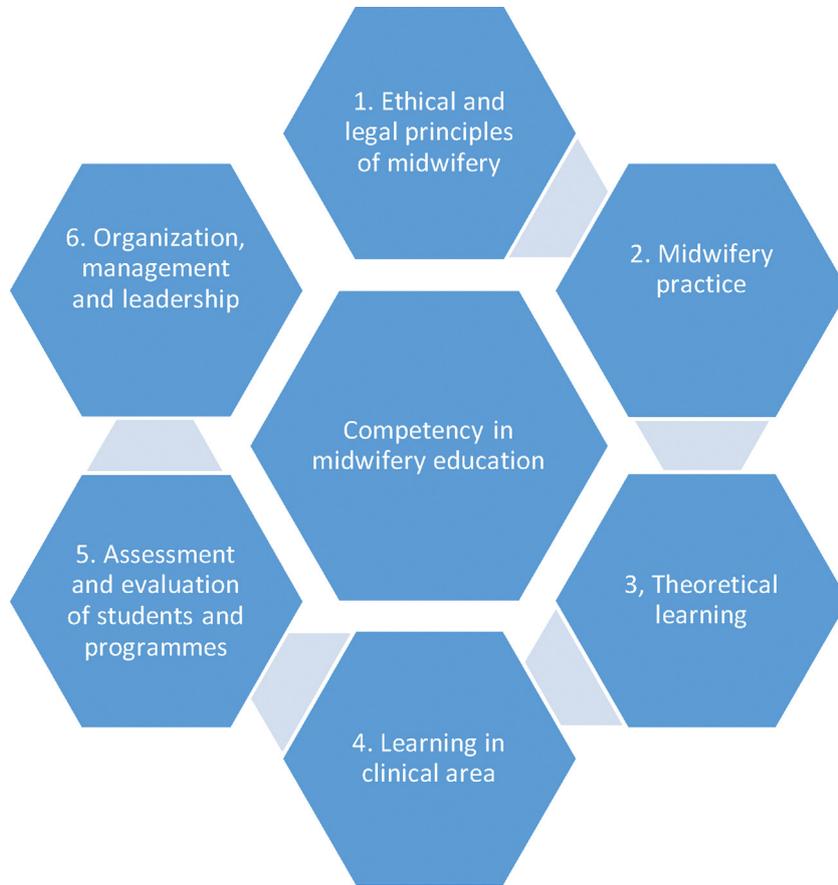


Fig. 1. Midwifery educator's competency domains.

Educators at 25 institutes (71%) out of 35 reported they were able to offer the advice and guidance necessary to develop safe women-centered practice that enabled students to become effective midwives. Ten (29%) institutions stated they were not able to offer this advice.

2. Midwifery practice

Competency domain 2: Midwifery educators maintain current knowledge and skills in midwifery theory and practice based on the best evidence available.
Area 2a) midwifery faculty

Bangladesh has, since the inception of midwifery as a profession in 2010, provided a 6 month training course in midwifery for nursing educators [4]. At the time this data was collected 70 (16.7%) out of a reported 418 educators taught on the midwifery program and 51 (12.2%) had master's degrees in sexual and reproductive and perinatal health. Two hundred and sixty-two (62.7%) had master's degrees in other areas such as reproductive and children's health, public health, health promotion and education and hospital management. A few had a master's degree from the Highly Skilled Migrant program. Fifteen (3.2%) had PhDs in health science, health and medicine science, nursing, administration or adult medicine and surgery.

Out of a total of 418 educators, only 53 (12.7%) of those with a master's degree taught only midwifery. Only thirty-three (7.9%) of the nursing educators who had received additional training in midwifery education taught exclusively on a midwifery program. Most educators teaching on the midwifery program were to a great extent involved in the nursing program.

Midwifery educators maintain their current knowledge and practice-based skills through ongoing professional development and when supervising students in clinical placement. Thirty (86%) out of 35 reporting institutions reported they had formal skills training opportunities for midwifery educators. Twenty-five (74%) out of 34 institutions reported that the educators had the competence to lecture simulation-based sessions. Thirty (86%) out of 35 reported that they maintained the competency of their midwifery educators through more general staff development events.

3. Theoretical learning

Competency domain 3: Midwifery educators create an environment that facilitates learning.
Area 2b) midwifery faculty

Midwifery educators created a positive learning environment that at many educational institutions. For instance, the skills lab was organized around ICM midwifery competences at 30 (86%) out of 35 reporting institutions. Educators from 25 (71%) of the 35 reporting institutions (35) stated they offered appropriate learning opportunities for their midwifery students. Skills labs, libraries and computer labs were most frequently mentioned as the methods used to enable students to gain hands-on practice. Educators at 26 (74%) out of 35 institutions claimed they had the resources (mobile phone, computer, internet access) they needed to support students on campus and while on their clinical placements. However, all of the institutions reported that there was no budget for clinical preceptors at the clinical sites. Thirteen out of 38 (34%) institutions

Table 2
Midwifery educator's arrangements for students' learning within the specialist areas of reproductive health reported from 36 institutions.

	YES	NO
Antenatal care	36 (100%)	0 (0%)
Maternity triage	22 (61%)	14 (39%)
Maternity ward including labor ward	36 (100%)	0 (0%)
Postnatal ward	36 (100%)	0 (0%)
Newborn and newborn ICU department	30 (83%)	6 (17%)
Operation theatre	35 (97%)	1 (3%)
Gynae/cervical and breast cancer screening	27 (75%)	9 (25%)
Manual vacuum aspiration/menstrual regulation	21 (58%)	15 (42%)
Family planning	30 (83%)	6 (17%)
Upazila Health Complex (secondary level of care)	11 (31%)	25 (69%)
Community union or clinic (primary level of care)	3 (8%)	33 (92%)

Table 3
Institutions' provision of clinical components of midwifery students' learning (n = 36).

	YES	NO
Active first stage management of birth	27 (75%)	9 (25%)
Initiation, establishment and maintenance of breastfeeding	31 (86%)	5 (14%)
Partograph interpretation	24 (67%)	12 (33%)
Newborn resuscitation	29 (81%)	7 (19%)
Intrapartum care	30 (83%)	6 (17%)
Family planning	28 (78%)	8 (22%)
Care of newborns with special needs	29 (81%)	7 (19%)
Assessment of women 6 weeks postpartum	19 (53%)	17 (47%)
Management of newborn illness	29 (81%)	7 (19%)

therefore stated that they regularly spent time supporting students on clinical placement. This suggests that 25 (66%) provided no such support.

4. Learning in the clinical area

Competency domain 4: Midwifery educators create an environment for effective clinical teaching of midwifery care.
Area 3) student body

Table 2 shows that the majority of midwifery educators provide clinical learning opportunities across the spectrum of reproductive healthcare by arranging clinical placements for students in various hospital wards. The number of midwifery students in clinical education at the time for the assessment was reported to be between 3 to 75 midwifery students (mean value 23.4, SD 24.9).

Table 3 shows that the majority of institutions' provide teaching across a wide range of clinical areas.

Table 4
Evidence of the assessment and evaluation of students' achievements in the midwifery program.

	YES	NO
Midwifery educators monitor and follow up students' records of clinical experience as per log- books and checklists (response from 37 institutions)	31 (84%)	6 (16%)
Midwifery educators grade students' records of clinical experience in logbooks according to checklists requiring examination of 30 full-term newborns, 100 antenatal and postnatal episodes and at least 30 normal and 10 assisted births (response from 35 institutions)	27 (77%)	8 (23%)
The sign-off clinician for students' clinical achievements is a clinically practicing nurse/midwife/doctor (response from 36 institutions)	31 (86%)	5 (14%)
Assessment strategies used to assess students' knowledge, practical skills and attitudes include:		
– Written examinations (response from 36 institutions)	36 (100%)	0 (0%)
– Viva voce examination (response from 37 institutions)	37 (100%)	0 (0%)
– Role play (response from 37 institutions)	35 (95%)	2 (5%)
– Objective Structured Clinical Assessment/Examination (OSCA/OSCE) (response from 36 institutions)	32 (89%)	4 (11%)
Students' complain about faculty being unfair and biased in assessing learning (response from 36 institutions)	6 (17%)	30 (83%)

5. Assessment and evaluation of students and programs

Competency domain 5: Midwifery educators are responsible for conducting regular monitoring, evaluation and assessment of programs and students.
Area 4) assessment strategies

Tables 4 and 5 show how institutions reported the assessment and evaluation of their students and their clinical performance.

Records of how students had performed academically before going out on placement was shared by 28 (78%) of the midwifery institutions with the healthcare professionals at their clinical partner sites. Thirteen institutions (36%) reported that their midwifery educators contacted clinical partner site staff to check students' performance on a daily (0, or 0%), weekly (8, or 22%) or monthly (13, or 36%) basis (n=36). Seven (19%) out of 37 institutions acknowledged that assessments required by the curriculum and course syllabi to prove eligibility for a final qualification were not always completed.

6. Organization, management and leadership

Competency domain 6: Organization, management and leadership
Area 5) curriculum

All institutions (38) reported that their curriculum was aligned with national health policies at the organizational, management and leadership level. Thirty-seven (97%) of the institutions stated they had been part of developing the national curriculum. Midwifery educators had participated in formulating the policy and program outcomes and in designing and implementation the curricula.

As Table 6 shows, the majority of institutions ensured that their students had fulfilled all of the required clinical components prior to graduation. That said, 10 institutions acknowledged that their students had not met the requirements for normal births and a further 8 failed to respond to this question at all.

It is the midwifery educators who are responsible for informing the healthcare professionals at the clinical partner sites about the content of their training programs, including curriculum structure, course content and learning outcomes. Twenty-seven (71%) of 38 reporting institutions declared that they shared their learning outcomes with their clinical partners at the beginning of each semester.

Discussion

This study of 38 public institutions shows the structural shortcomings of midwifery education programs in Bangladesh. These shortcomings were made evident through the introduction

Table 5
Institutional assessment and evaluation of clinical practice sites (reports from 38 institutions).

	YES	NO
Regular audits of clinical practice sites are being performed to ensure sufficient opportunity for midwifery students to gain midwifery experiences	25 (66%)	13 (34%)
Commitment from healthcare professionals at the clinical sites (doctors, nurses, support staff and managers) to collaborate closely with the institute/college in order to facilitate support for midwifery students	37 (97%)	1 (3%)
A system is in place to identify and appoint clinical mentors to facilitate supportive supervision of midwifery students	24 (63%)	14 (37%)
A written policy with minimum criteria has been developed to ensure students' safety and wellbeing in the clinical and learning environment	34 (89%)	4 (11%)

Table 6
Extent to which midwifery educators ensure that students fulfill the clinical components outlined in the national curriculum before graduation.

	Yes	No
40 births, whereof 30 normal (reports from 30 institutions)	20 (67%)	10 (33%)
100 antenatal assessments (reports from 31 institutions)	29 (94%)	2 (6%)
100 postnatal assessments (reports from 31 institutions)	29 (94%)	2 (6%)

of a context-specific accreditation assessment tool [22] which was based on the ICM's Global Midwifery Educations Standards [16] and the WHO's midwifery educator core competencies [17]. The tool revealed that the main problem with midwifery education in Bangladesh was the relationship between the midwifery educational institutions and their clinical placement sites. The study showed that 29% of the clinical preceptors were not aware of the expected learning outcomes for the midwifery students' clinical practice. For example, few of them realized that students were required to have hands on 40 births in order to graduate. This explains why students at 33% of the midwifery institutions did not meet the clinical requirements for supporting births. Best practice clinical midwifery supervision models to achieve clinical requirements is a global challenge [23]. This needs to be particularly addressed in Bangladesh, as one-third of Bangladeshi midwifery students will successfully graduate without achieving the competencies deemed by international standards and local regulations to be an effective and well-educated midwife [24]. One solution might be to establish formal communication links between educators at the institutions and preceptors at the clinical placements sites. This could include scheduled meetings between student, clinical preceptor and educator to discuss the students' learning progress towards set learning outcomes. This would reduce the nearly 30% of institutions reporting that their educators had no contact with their clinical placement sites. In a recent study of the implementation of the context-specific accreditation assessment tool in Bangladesh [25], midwifery educators reported that the introduction of the accreditation process had encouraged them to visit their clinical sites more frequently and that the communication between the clinical sites and the educational institutions had improved as a result. This can perhaps be explained by the fact that since 2016 the United Nations Population Fund (UNFPA) and the Bangladesh government supported the development of the national midwifery educational program through partnership agreements with national and international organizations such as Save the Children and UCEP in Bangladesh, the Royal College of Midwives in the United Kingdom, and the Dalarna University, Sweden. To improve learning outcomes for midwifery students, local physicians have been funded to support selected clinical placement sites across the country and an online mentorship program, available to all 38 educational institutions, has been developed in cooperation with UNFPA Bangladesh and Dalarna University to encourage midwifery educators to implement the national curriculum [9]. Despite these efforts, 9

institutions (25%) in this study indicated that there was no opportunity for their midwifery students to practice comprehensive sexual and reproductive health care, five (14%) reported that their students could only observe reproductive health practices and that there was little opportunity for them to assist or practice midwifery in clinical placement sites. The issues regarding the lack of clinical experience in midwifery education as lack of relationships between the education institutes, are challenges also in other countries and identified in the recent WHO Strengthening Quality Midwifery Education framework for action [2]. Supportive review from other countries on this issue [23], would clearly benefit the way forward in Bangladesh.

This study also found that 14% of the institutions did not have a simulation lab organized to enable learning informed by the ICM competencies, 26% of the educators did not have the professional competence necessary to deliver simulation-based training and 11% did not use OSCE exams to prepare their midwifery students prior to their clinical placement. Even when midwifery educators in Bangladesh were equipped with the strategies to improve the quality of their graduates, this proved difficult to implement. Although more teachers now had master's degrees, had themselves learned about women's sexual and reproductive health rights and were encouraged to empower their students in a similar way, they struggled within an educational system which made it difficult for them to teach what they had been taught themselves [7]. Given that most of the midwifery educators in Bangladesh are not midwives according to international standards [4], a rigorous educational system that supports these educators is necessary in order to ensure the production of high-quality midwives from each of the diploma, bachelor and master's degree levels [7]. This is essential for a sustainable educational environment. Moreover, in order to close the knowledge gap between educators and clinical preceptors, this study highlights the need to build the capacity of clinical preceptors so they can work together with midwifery educators on assessment strategies. One such strategy could be to enroll preceptors on in-service training courses or other educational programs. Such a strategy could result in more midwifery students fulfilling the required learning outcomes [12]. It is anticipated that the figures will have improved by the time of the follow up assessment, given that ongoing interventions are continuing. It is important that accreditation is not a one-time event but rather the start of a consistent quality assessment process with regular follow-ups encouraging and providing opportunities for improvement [21].

This study also found that 25% of the midwifery institutions did not have the capacity to provide clinical preceptors who could support students' training in the active management of first stage labor, 33% did not support students' training in the interpretation of partograph, and 47% did not support students' training in the assessment of women six weeks postpartum. Given that most of the factors linked to maternal mortality and morbidity are related to hemorrhage and obstructive labor, many of the future midwives in Bangladesh are still not fully prepared to manage life-threatening conditions for women during and after childbirth. Based on our findings, and the fact that quality midwifery care provided by midwives educated and regulated to international standards [16] can prevent over 80% of all maternal deaths, stillbirths and neonatal deaths when integrated into the health system [26], we stress the importance of improving the integration between theoretical knowledge as taught in the classroom and what the students experience in clinical settings.

By building partnerships between government, academia, professional bodies, non-governmental organizations and donors, Bangladesh has made significant progress towards developing midwifery education and improving sexual and reproductive health and rights for women and newborns [6]. With this in mind, it is imperative that Bangladesh is supported to address the continuing structural shortcomings within its educational system with a feedback-appeal-response system that will enable midwifery institutions to have weaknesses identified and be given time and support to rectify these. For Bangladesh to respond to these identified shortcomings, we suggest that an action plan for each individual education institution be developed. The next step, which is also suggested by Luyben et al. [27], is to use an external review process and self-evaluation to identify areas for improvement and how they can be improved. The accreditation assessment process should be amended to include the clinical placement sites so that clinical education is more integrated within the national midwifery curriculum. This internal accreditation process, would prepare Bangladesh for the external ICM global Midwifery Education Accreditation Programme [19].

Strength and limitations

The key strength of the Bangladeshi accreditation process has been its participatory approach. Data collectors were government officials responsible for midwifery education and services in Bangladesh [12]. Their status, however, could be seen as a weakness in the accreditation system, putting as it does pressure on institutions to deliver positive results and be less transparent about their weaknesses. The selection of assessors trusted within the sector is therefore crucial [28]. The accreditation tool is itself limited. It has not been subjected to any reliability tests, although it was developed with inspiration from global tools and culturally adjusted to the Bangladesh setting [12] which strengthens its credibility. In terms of transferability, the findings from this study can be transferred to similar settings with some caution [29]. Institutions sometimes chose not to answer certain questions, affecting the validity of this descriptive study.

Conclusions

This study can be used as a benchmark against which to measure progress towards national and global milestones to ensure that midwifery students in Bangladesh achieve the required core competencies before graduating as registered midwives. There are several shortcomings that are needed to be addressed before this happens more widely. Right now one third of the midwifery students in Bangladesh do not meet the defined clinical learning outcomes for supporting a woman during birth. We

suggest an accreditation assessment system that integrates the clinical placement sites, builds in a feedback-appeal-response system and develops a system for improved communication between the educational institutions and the clinical placement sites. This will ensure the full implementation of the midwifery curriculum and thus produce midwives who can deliver the full scope of sexual and reproductive health services.

Conflict of interest

None declared.

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Ethical statement

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