

## Research Article

# Reflective Practice and Factors Affecting it: Perceptions of Pediatric Surgery Residents

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### Abstract

**Background:** There is scarcity of literature about factors affecting reflective practices in local context. By focusing on these factors, we can help promote engagement in reflective practices in our culture. Objective of this study was to explore the barriers to and facilitators of reflective practice by post graduate surgical residents.

**Methods:** Using action research study design, qualitative research was conducted in the department of Pediatric Surgery, Mayo Hospital to explore different factors affecting reflective practice in postgraduate surgical residents in their daily practice. A workshop on reflective practices was conducted, followed by weekly morbidity/mortality meetings and case-based discussions deliberating using Gibbs' reflective cycle. After a year, focus group discussion using a heterogenous group of nine residents was conducted to explore the factors affecting reflective practice. It was transcribed and analyzed thematically.

**Results:** Reflective practice was perceived to improve critical appraisal, deeper learning, self-monitoring, and patients' outcomes. There was resistance towards reflective writing. Themes related to factors affecting reflective practice were organization, time allocation, communication, workplace environment, interpersonal relations, guided reflection, and feedback. Involvement of multiple disciplines in 'reflection before action' was identified for future implementation.

**Conclusion:** Provision of guided reflection and constructive feedback were the main facilitators of reflective practice. Generally, improving organization, workplace environment, interpersonal relations, and accommodating individual learning styles can enhance reflective practice in our context, and help developing habit of lifelong learning.

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### Introduction:

Reflective practice is “the ability to critically reflect on one’s experience”, “engage in the process of continuous learning”, “consciously question the truth of one’s and others’ learning”.<sup>1-4</sup> As one’s professional identity develops, there are aspects of learning that necessitates an understanding of one’s personal beliefs, attitudes, and values in relation to those of the profes-

sional culture, reflection provides an explicit method for achieving this. It helps in solving complex problems by incorporating theoretical knowledge into practice. In other words, reflection is a type of mental process that involves a goal or anticipated result and is used to address highly unstructured or complex problems for which there isn’t a clear solution.<sup>1,5-14</sup>

Available literature predominantly describes reflective

practice implications on learning and practice and focuses on increasing reflective practice by improving its capacity. Reflective capacity can be developed by reflective writing, critical incident reports, presentations, and enhanced by meta-cognition and guided reflection with feedback. By increasing reflective capacity, diagnostic decision making, critical analysis, and deliberate practice improves. As it improves deeper learning and critical thinking, new insights are gained about self and one's practice, ultimately attaining expertise.<sup>5-14</sup>

Reflective practice helps in attaining the habit of lifelong learning. It is an essential tool to improve judgement, skills, problem solving capacity and resilience. By enhancing it and making it part of curriculum, many core competencies can be attained.<sup>1,6,9,15</sup> Objective of this study was to explore the factors affecting reflective practices of post graduate surgical residents in their daily practice, as inadequate literature is available about barriers and facilitators of reflective practice in local context. By focusing on these factors, we can help promote engagement in reflective practices in our culture.

### Methods:

Using action research study design, a qualitative research based on 'constructivist' research paradigm was conducted in the department of Pediatric Surgery, Mayo Hospital, Lahore from Jan 2021 to Dec 2021. The question explored was how different factors affect reflective practice in postgraduate surgical residents in their daily practice, based on phenomenology.

After institutional review board (IRB 531/RC/KEMU dated 29/07/2020) approval, all the pediatric surgery residents of Mayo Hospital, Lahore attended the workshop on reflective practices outlining definition, various models of reflective practices, its importance, practical implications in curriculum. They were also provided with weekly opportunity to reflect (guided by supervisors, peers, and reflection on action/ before action) for a period of 12 months in morbidity and mortality meetings, and through case-based discussion formally. They were asked to deliberate on: What did we do? Why did we do it that way? What should we do? How are we doing? How do we transform or improve it? Based on Gibbs' reflective cycle model.<sup>16</sup> After 6 months, the residents who refused to give consent, those who

were not practicing reflection or whose training finished/left ward before the study completed were excluded from the study. To achieve data transparency and its use for improving reflective practices in department, faculty was involved. The aim was to provide leadership for improvement and avoid culture of scapegoat or victimization or using data for accountability of study participants.

Sampling technique used was 'purposive sampling'. Reasons for collecting a non-probability sample was to achieve a heterogeneous group (age, gender, socio-economic background, year of residency). Out of 22 residents, based on inclusion/exclusion criteria, nine were selected. After explaining the purpose of focus group discussion, again informed consent was taken. A focus group discussion took place in presence of a single facilitator. Exploration of factors affecting reflective practice was done through open ended questions (how do you experience reflective practice in daily life? How do you conceptualize reflective practice? What factors cause success of reflective practices in daily routine? What factors inhibit reflective practices in daily routine?). This discussion was audio and video tapped and transcribed verbatim. To remove any biasness and achieve transparency, it was transcribed by two independent researchers.

For qualitative data, thematic content analysis was done, and mind map was constructed based on themes and subthemes using visual diagrams and drawing connections to achieve a holistic picture of factors affecting reflective practice.

### Results:

A total of nine postgraduate residents took part in focused group discussion. Four open ended questions asked were regarding conceptualization of reflective practice, its experience in daily life, and factors promoting or inhibiting its practice. Visual diagram showing frequently used words generated is given as Figure 1. Table 1 provides overview of themes and sub-themes generated, along-with responses of participants.

- **Perception about reflection and reflective practices**

When asked about their individual perception of reflection and reflective practices, every participant understood its importance and implications.

“Reflection is to review and rethink the mistakes and things that go wrong during a day. To analyze what would have been done at that point, what were the alternatives and was it the lack of knowledge, burden of ward work or some other reason that point was missed”.

Sub-Themes emerged were ‘patients’ outcomes’, ‘critical appraisal’, ‘self-monitoring’, ‘deeper learning’, and ‘learning from others’

**Sub-theme:** patients’ outcomes

“Reflection is basically about how to bring about improvement in patient’s outcome”

**Sub-theme:** critical appraisal and self-monitoring

“Whatever mistakes we make, we reflect upon them during discussion of that case so that whenever we face a similar scenario, we do not make that mistake again”.

“self-reflection and then there should be discussion among the colleagues. The purpose of this approach should be the benefit of the patient, wherein a detail that might be missed by one person can be pointed out by the other, helping in better patient outcome”.

**Sub-theme:** deeper learning and learning from others

“Made us aware and cautious of not repeating the mistake and missing some crucial point”.

“We become sensitized to small details and mishaps”.

Generally, all believed in self-analysis, accepting ones’ mistakes, analyzing, and developing action plans.

#### • **Factors affecting reflective practices**

Perception about enablers/ barriers of reflective practice revealed themes related to ‘organization’, ‘workplace environment’, ‘interpersonal relations’, ‘guided reflection’, and ‘provision of feedback’.

The emphasis was on providing more opportunities for discussion and consultation with seniors systematically.

**Theme:** Organization

“In my opinion these practices should be performed more frequently, in an organized way and pre-planned”

“There is discussion during rounds and in an informal way, but as a part of curriculum and in a formal way, it is lacking”.

Sub-themes emerged under the theme of ‘organization’ were mandatory attendance, availability of seniors, allocation of time.

**Sub-theme:** attendance

“Residents must be given schedules for these meetings

and be prepared for them to help them in achieving better outcomes”.

“Formal meetings should be declared a must-attend session from higher authority”.

**Sub-theme:** availability of mentors, seniors

“Sometimes there is a lack of supervision and briefing by the seniors during the examination of a patient, so I can’t communicate my opinion. To improve this, physical presence of the consultant in the department should be obligatory”.

**Sub-theme:** time

All agreed that more time should be allotted for reflective practice considering its relevance.

**Theme:** Environment

Learning in a controlled and supervised environment was identified as more productive and rewarding. Participants unanimously agreed on the fact that sometimes reflective practice was hindered owing to some unavoidable and deep-rooted workplace dilemmas.

Sub-themes emerged were ‘focus on communication’, and ‘freedom and safety in work-place environment’.

**Sub-theme:** communication

“There should be liberty of communication and no communication gap”

The emphasis was on involving multiple disciplines and paramedics especially in preoperative management of patients thus focusing on ‘reflection before action’.

**Sub-theme:** freedom and safety

“In depth discussion with seniors in an environment where you feel free to express yourself comfortably and without any pressure”.

“A person feels comfortable and absorbs the most amount of information to rectify his mistake. In other words, there should be liberty of speech”

**Theme:** Inter-personal relations

Inter-personal relations affected reflective practice either positively or negatively.

“What I think is one of the hurdles in reflective practices is the attitude of a few seniors. There is a fear of being scolded and reprimanded with these people that stops us from freely discussing with them”.

“Another thing that affects reflections is judgmental behavior. Deficiencies are exaggerated and efforts are seldom seen positively”.

**Theme:** Guided reflection and provision of construc-



like availability of seniors for guided reflection, a safe environment, and freedom to communicate openly. Respect for each other, confidentiality, involvement of multi-disciplines was identified as sub-themes in organization and environment for promoting reflective practice. Curricular restructuring is also needed to allot more time for reflective practice. These findings correlate with existing literature.<sup>4,6,17,18</sup> Previous studies reveal time commitments, and feedback inefficiency as potential barriers of reflective practice.<sup>4</sup> Perception of relevance, organizational climate, respect between colleagues, freedom of opinion, and mentorship with role-modeling are considered other main factors which can enable or inhibit reflective practice.<sup>2,9,18</sup>

In this study, residents didn't identify 'mentors/ champions/ role models' as main facilitators for reflective practice, rather peers/ seniors providing timely and constructive feedback in a positive environment as main facilitators. In literature, one of the main barriers identified is the need for greater training to practice reflection.<sup>2,9</sup> In this study, we didn't encounter this barrier due to well attended interactive workshop conducted earlier.

Although writing journals, portfolios are preferred method to increase reflective capacity and enhance reflective practice,<sup>1,2,6,7</sup> there was a trend to move away from traditional writing. Preferred methods were video, audio-recording, taking notes on cellphone. Literature also suggests that generally trends are shifting towards web based reflective capacity.<sup>4,11,13</sup> This preference may reflect their learning styles.

This study identified problem areas for improvement and supports use of reflective practice in our set-up, yet being a single centered study, its findings can't be transferred to other cultures. Sustainability to maintain change was also not documented because of shorter duration of study.

### Conclusion:

Provision of guided reflection and constructive feedback were the main facilitators of reflective practice. Generally, improving organization, workplace environment, interpersonal relations, and accommodating individual learning styles can enhance reflective practice in our context, and help developing habit of lifelong learning.

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