ABSTRACT

**Background:** Reflection and reflective practices are considered as one of the important components of medical education and imperative for self-directed lifelong learning. The objective of this study was to take reflections of interns what they learnt during posting in internal medicine and challenges they faced and what was gratifying moments.

**Methods:** MBBS course in Nepal is of five and half years including one-year mandatory rotational internship of which 2 months posting in internal medicine. The Internship of first MBBS batch at Chitwan Medical College started in May 2015. At the end of last round of posting of first group within department of internal medicine, written reflections of all interns were taken. The data were streamlined manually and presented.

**Results:** Interns updated and enhanced clinical, report interpretation, correlating clinical condition with lab reports, decision making, management, documentation, counselling and communication skills for a limited time posted in medical wards, OPD, ICU, CCU and hemodialysis unit. Some of the challenges were dealing patients with different attitude, to become responsible trustworthy doctor, responding to expectations of patient and family and to keep patient informed. When patient believes and trusts on us and happily returns home were among the gratifying moments mentioned by interns. In fact, students were not taught about reflection during 4 and half years of study.

**Conclusions:** Though interns reflected but approach was not systemic as they didn’t learn about reflection during course of study. Incorporate reflection as a teaching learning and assessment methods in curriculum, implement it and make reflective practice as core professional skill.

INTRODUCTION

Reflections and reflective practices are believed to be important in medical education and medical practice and have been documented in literature. There are various models of reflection described in literature. These models describe level of reflection by reflective activity. Reflection is an important feature and integral component of lifelong self-learning and is usually considered to be personal and individual process but group or team can reflect upon their learning. Internship is considered as a transition training period of learning from students to practicing doctor or from end of undergraduate study to the beginning of postgraduate study. As per 2008 Tribhuvan University Institute of Medicine (TU-IOM) curriculum, the internship is of 12 months duration, rotational and mandatory; intern has to complete 2 months internship in internal medicine.

Chitwan Medical College (CMC) Bharatpur, Nepal is
one of the medical colleges in private sector affiliated to TU-IOM, Nepal. Internship of first batch of MBBS at CMC started in May 13, 2015. First ten Interns were posted in department of Internal Medicine for two months for rotational posting in different sections of department. At the end of posting in department, reflections of interns were taken with the objectives what they learnt being intern doctor during these days and what challenges they faced and what was gratifying moments for them.

METHODS

Chitwan Medical College (CMC) located in Bharatpur, Nepal is one of the medical colleges in private sector affiliated with Tribhuvan University Institute of Medicine (TU-IOM) Nepal. Undergraduate MBBS course is of five and half years including one-year mandatory rotational internship.

Internship Process

Internship of first batch of MBBS at CMC started in May 13, 2015. The interns were divided into 24 groups A to X posted in rotation basis 2 months in Internal Medicine, 2 months in surgery, 2 months in Gynecology & Obstetrics, one-month in Pediatrics, one month in Orthopedics, one month in Emergency, 15 days in Anesthesia, 15 days in ENT, 15 days in family Planning, 15 days in Eye, 15 days in Dermatology and 15 days in Psychiatry as per TU_IOM curriculum of 2008.

First ten Interns (names starting from A) were posted in department of Internal Medicine for two months from May 13, 2015, to July 12, 2015. Interns were divided into five subgroups; each sub group contains 2 interns based on their rotational posting in Medical Ward A (12 days), Medical Ward B (12 days), Intensive Care Unit (12 days), Outpatient Department-OPD (12 days) and Coronary Care Unit-CCU (each intern for 6 days) and Hemodialysis Unit-HDU (each intern for 6 days). Sub group of 2 interns was put on night duty on rotation basis.

Education activity in the department of Internal Medicine: Interns’ Portfolio

A Day before start of posting, interns were oriented about their posting in different sections of department, their roles and responsibilities, their tasks, about punctuality and attendance, about documentation of patients’ record, acquisition of skills, commitment to duty, behavior towards patients and co-professionals, participation in rounds, group discussions, morning meeting, academic and research activities about leaves and entries in log book. Log book, instructions to interns, posting schedule and academic activities schedule documents were provided to them.

Night group interns had to present patients’ info in brief who admitted between 17.00 hours (5.00 pm) to next day 8.00 hours (8.00 am) and rest of the interns shared summary information of the patients admitted in their section between 8.00 am to 5.00 pm last day.

Academic session for one hour once in a week was scheduled on every Tuesday 1.00-2.00 pm. During 2 months periods 8 academic sessions were arranged, case presentation two sessions, journal club one session, clinico-radiologic conference one session, mortality review one session, national/international guidelines of common diseases prevalent in Nepal one session and two sessions on essential learning. This sort of academic session activity was first time introduced to interns in medical schools in Nepal.

Data Collections

At the end of last round of posting of first group of first batch in department of internal medicine written reflections of all ten interns were taken on with their consent. They had to reflect on two questions: 1) What you have learned being an intern doctor during these days and 2) What challenges you had faced and what was gratifying moments for you.

The data were streamlined manually and presented.

RESULTS

Reflections of 2 interns posted in OPD

1) What you have learnt being an intern doctor during these days.
   • How to examine the patient in busy OPD in limited time (take a brief history, do focused physical examination)
   • What investigations to be sent for patients with different complaints presented in OPD in limited time
• How to interpret investigations and correlate these with patient’s conditions in limited time and how these help in diagnosing patients’ problem.

• Got to know trade names of different drugs to be prescribed in OPD.

• Prescribed common medicine for common diseases

2) What challenges you had faced and what was gratifying moments for you.

Challenges faced

• How to examine the patient, interpret investigation and reach to conclusion (diagnosis) in limited time.

• Different people have different attitude, so it is difficult to tackle some people

Gratifying moments

• Gained confidence, enhanced clinical skills, developed skills how to deal patient properly in OPD

• Correlation of clinical findings & lab reports findings leading to conclusion in many cases.

Reflections of 2 interns posted in ICU

1) What you have learnt being an intern doctor during these days.

• Posting in ICU is much more responsible task

• Conceptualization of disease process is really important

• Continue to update knowledge is essential

• How to write progress report, procedure notes on continuation sheet and how to fill up CARDEX

• Procedure like cannulation, dressing, catheterization

• Counselling the family of ICU patient

• Investigations needed for ICU patient

2) What challenges you had faced and what was gratifying moments for you.

Challenges faced

• Evening round was flying conducted by consultant, difficult to grasp things

• Nursing care is challenging- care of bed sore, suctioning, physiotherapy

• To become responsible doctor is really a challenge

• More expectations of patient and family

• To make patient informed about his/her condition

Gratifying moments

• When patient improve in ICU

• Gained confidence after doing procedure with success

• When I suspect some disorder, send investigations then reports correlate with that disorder.

Reflections of 2 interns posted in CCU

1) What you have learnt being an intern doctor during these days.

• Learnt by observation and practice about management of cardiac cases like acute coronary syndrome (ACS), hypertensive emergencies, atrial fibrillation

• ECG reading and monitoring

• How to manage critical patients

• How percutaneous coronary intervention (PCI) is done

2) What challenges you had faced and what
was gratifying moments for you.

Challenges faced

- Emergency management of the cardiac patient is a challenge as quick decision can save life
- Communicating to serious patient
- Getting cooperation of faculty during emergency

Gratifying moments

- Bringing patients out of the critical condition like a miracle
- It feels good when patient return home being healthy
- Smile on the face of patient after recovering from shock

Reflections of 2 interns posted in Hemodialysis (HD) UNIT

1) What you have learnt being an intern doctor during these days.

- Observed how hemodialysis is done
- Majority of Chronic kidney diseases (CKD) patient was suffering from DM II and HTN but most of them didn’t know the importance of taking medication for DM II & HTN regularly
- Good level of communication with patient
- About faith of patient to doctor, respect paid to doctor, cooperation of patient

2) What challenges you had faced and what was gratifying moments for you.

Challenges faced

- It was breaking to see very young patient on hemodialysis, counselling of very young patients who have CKD and on hemodialysis
- What to do for the patient who have not enough money for hemodialysis because of their low socioeconomic status

- How to effectively deliver to the patient as knowledge is not enough for delivery of care

Gratifying moments

- Satisfaction of the CKD patient from treatment offered
- Relief of the patient from acute symptoms after hemodialysis
- Love and respect shown by the patients

Reflections of 4 interns posted in medical wards

1) What you have learnt being an intern doctor during these days.

- About systematic way of management from admission till the discharge of patient
- Importance of coordination between doctors, nurses, lab personals in the management of patient
- Procedures like IV cannula insertion, ascitis tapping, pleural tapping
- About how medical officer and consultant do their job
- Interaction with patient and family
- Counselling of patient and family
- Learning during round
- Write progress note, discharge slip, trans out note, fill investigation form, prepare CARDEX

- Not entirely depend on the file record of patient but see and examine the patient, if doubt exists then look into record carefully whether it tally with patients’ condition or not and advise lab test or change treatment or consult with nurse, colleagues, medical officer or consultant
- Importance of daily progress of the patient
- Team work
- Good inter professional relationship
2) **What challenges you had faced and what was gratifying moments for you.**

**Challenges faced**

- Being a trustworthy doctor quite challenging and also pride
- Doing different type of procedure independently
- Satisfying the patient and family to make them understood about disease process and treatment process
- Maintenance of accurate record of the patient
- Observing Infection prevention protocol
- Sending investigation on time
- Counselling the patient and family
- Getting written guidelines and protocols

**Gratifying moments**

- Improving confidence in clinical skills
- When patient believes and trusts us
- Earning respect when patient happily returns home
- Guidance by medical officer and nurses
- When arrive to definite diagnosis of patient
- When patient rely on us

**Observation of authors**

The interns didn’t reflect systematically; the reasons could be 1) they might not have learnt about the importance of reflection in medical education, 2) they might not have experience to write reflection and 3) they might not have understood what is reflection. Authors reviewed their teaching learning activities over 4 and half years of their study and concluded that they didn’t learn about the reflection process.

**DISCUSSION**

After intellectual and academic hard work of four and half years and qualifying university examination, a medical student becomes an intern and eligible for the title of Doctor (Dr.) that make him/her feel gratified, pleased, proud and satisfied. However, it is the time to practice under supervision whatever is learnt and updated and perfected different skills and absorbed how to apply this in the real-life situation practice.7,9

Self-reflection is to assess one’s own abilities. Schon describes two types of reflection, reflection-in-action and reflection-on-action. Reflection-in-action is task bound reflective process in which one continue to act but reshape his/her action through explicit cognition, while reflection-on-action is a post experience reflection on what one performed.11 In this study reflection-on-action was taken from the interns at the end of their posting of last round in various sections of department of internal medicine on what they have learned being an intern doctor during these days and what challenges they had faced and what was their gratifying moments.

**Reflections of Interns**

Interns posted in OPD stated that they learnt how to examine the patient, take decision on investigations to be sent and interpret reports in limited time, trade names of drugs and prescribe medicine for common diseases.

Interns posted in ICU mentioned that they learnt about conceptualization of disease process, write progress report, procedure note and CARDEX, procedures like cannulation, dressing, catheterization, counseling of family, importance of input/output and electrolyte balance, investigations required and drugs used for ICU patients.

Interns posted in CCU mentioned that they learnt management of cardiac cases like ACS, hypertensive emergencies, atrial fibrillation, ECG reading and monitoring, management of patients in critical condition and how PCI procedure is done.

Interns posted in HD unit stated that they learnt how HD is done, communication to the patient on HD, faith of patient in doctor and cooperation of patient.

Interns posted in medical wards disclosed that they learnt systematic way of management of patient, importance of coordination for the management of patient, procedures like IV cannula insertion, ascitis
tapping, pleural tapping, how medical officer and consultant do their job, interaction with patient and family, counselling of patient and family, writing progress note, discharge slip, trans out note, investigation form, CARDEX, working in a team and inter professional relationship.

Challenges

Interns faced the challenges like how to examine the patient, interpret report and reach to conclusion in limited time and deal with patients with different attitude were the challenges faced by interns posted in OPD.

The challenges for interns posted in ICU were grasping things in evening round, nursing care, to become responsible doctor, responding to expectations of patient and family and to keep patient informed about his/her condition.

The challenges for interns posted in CCU were emergency management of the cardiac patient, communicating to serious patient and getting aid of faculty during emergency.

The challenges for interns posted in HD unit were counselling of very young patients having CKD on hemodialysis, arranging HD for patient having financial constraints and delivery of care to such patients.

The challenges for interns posted in wards were being a trustworthy doctor, doing different type of procedure independently, satisfying the patient, maintenance of accurate record, observing Infection prevention protocol, sending investigation on time, counselling the patient and family and getting written guidelines and protocols.

Gratifying moments

Dealing patient properly in OPD and diagnosing patients’ problem in OPD were the gratifying movement for interns posted in OPD.

Interns posted in ICU were felt gratified when patient improve in ICU, after doing procedure successfully and when reports correlate with suspected disorder.

When patient become out of the critical condition, when patient return home with smile and when patient recovers from shock were the gratifying movement for the interns posted in CCU.

Interns posted in HD unit felt gratified when patient recovered from acute symptoms after dialysis and love and respect shown by the patients.

Interns posted in wards felt gratified when patient believes and trusts them, earning respect when patient happily returns home, when patient rely on them and when they reach to definite diagnosis.

CONCLUSION

The interns didn’t reflect properly and systematically; the reasons could be 1) they might not have learnt about the importance of reflection during medical education, 2) they might not have experience to write reflection and 3) they might not have understood what is reflection. Authors reviewed their teaching learning activities over 4 and half years of their study and concluded that they didn’t learn about the reflection. It is essential for medical students (healthcare profession students) and health care professionals to be reflective. There is a need to incorporate reflection as a teaching learning and assessment methods in curriculum, implement it and make reflective practice as core professional skill. Students of medicine (health professions) must be self-directed lifelong learner, demonstrate better thinking and decision-making skills and assess and appraise evidence critically.12-15

ACKNOWLEDGEMENT

We respectfully acknowledge the interns who participated in this study and consented to publish the article.

REFERENCES

1. Mack H, Filipe H. Pilot study assessing reflection ability of practicing Australian and New Zealand ophthalmologists using the Groningen Reflection Ability Scale. MedEDPublish 2017; 6 (3) 12, [DOI]
2. Koole et al Does reflection have an effect upon case-solving abilities of undergraduate medical students. BMC Medical Education 2012, 12:75, [LINK]


10. Curriculum for Bachelor of Medicine and Bachelor of Surgery Tribhuvan University Institute of Medicine. Revised in 2008 published by Medical Education Department, Institute of Medicine, Kathmandu, Nepal.


