

## Perception, Knowledge and Practice of 'Reflective Learning and Writing' Among Interns in Academy of Medical Sciences, Pariyaram

AK Jayasree\* and Binoo Divakaran

Department of Community Medicine, Academy of Medical Sciences, Pariyaram, Kannur, Kerala, India

\*Corresponding author: AK Jayasree, Department of Community Medicine, Academy of Medical Sciences, Pariyaram, Kannur, Kerala, India, Tel: +04972808111; E-mail: akjayasree@gmail.com

Received date: November 09, 2018; Accepted date: November 21, 2018; Published date: November 27, 2018

Copyright: © 2018 Jayasree AK et al. This is an open-access article distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.

### Abstract

**Background:** Since we are moving towards competency based medical education, reflective practices are becoming relevant. Before introducing these new education systems, it is better to assess the perception, knowledge and practice of reflective learning among graduates. Hence the study was planned with following

**Objectives:** 1. To understand the perception about reflective learning and writing among interns. 2. To assess the knowledge about reflective learning and writing among interns. 3. To evaluate the practice of reflective learning and writing among interns.

**Material and methods:** A cross sectional study was designed. Study population included all the interns (72) worked in Academy of Medical Sciences during study period. A semi-structured interview format was used to collect data. Likert scale was used to score the answers under the three domains. Content analysis was also done for the narratives given by participants for open ended questions.

**Results:** Majority of interns (95% and 98% respectively) have satisfactory perception score and knowledge score on reflective learning. But majority of interns (94%) do not have satisfactory practice of reflective writing. This is because they are not instructed to do it. Majority are willing to do it if they are guided. They think that it can be introduced into undergraduate curriculum and log book writing during internship.

**Conclusion:** There will be acceptance to reflective learning and writing if it is introduced into curriculum.

**Keywords:** Reflective learning; Reflective writing; Interns

### Introduction

Medical education is undergoing a paradigm shift in recent years, as the need for a medical curriculum which enhances the competence of medical graduates to meet the needs of the society is well recognized. In India, we are moving towards a competency based medical education. Medical council of India envisages it as designing and implementing medical education curriculum that focuses on the desired and observable ability in real life situations [1]. Competency based education aims at excellence through learner centered approach. The learner should be capable of applying the skills in real life situations. This include looking back at what has happened, analyzing the situation with different perspectives, connecting theory and practice, and taking it forward to see how meaningful it is for the learner and how's/he can make progress on it [2].

This newer educational concepts are not yet practiced in our settings. Students do not have much idea about this. Before introducing any new methodologies, knowledge and acceptance level of both learners and teachers have to be assessed. An interview with interns will be helpful to assess their perception, knowledge and practice of reflective learning and writing among them. Interns are fresh from their learning and novice in medical practice. They may be enthused with new ideas and it is an ideal time for introducing newer

concepts to them. They are assigned to write logbook. But without a proper understanding of reflective learning and writing, this is not used effectively. In this context, a study was conducted among interns to assess their level of knowledge and practice of reflective writing.

### Gap

There are inadequacies in the perception, knowledge and practice of reflective writing among the medical graduates.

### Research Question

Are medical graduates aware, having proper perception and practicing reflective learning and writing?.

### Objectives

1. To understand the perception about reflective learning and writing among interns.
2. To assess the knowledge about reflective learning and writing among interns.
3. To evaluate the practice of reflective learning and writing among interns.

## Review of Literature

Reflection is defined by the Oxford English Dictionary as The action or process of thinking carefully or deeply about a particular subject, typically involving influence from one's past life and experiences [3]. Reflection is a way of enabling self-development and deeper learning by looking back at an experience so as to learn from it and then move forward.

Reflection is an exploration and explanation of events. It is not just description, but Involves revealing anxieties, errors, and weaknesses, strengths and successes [2]. It is action or process of thinking carefully or deeply about a particular subject, typically involving influence from one's past life and experiences and then moving it forward [4]. Main features of reflective learning include linking theory and practice, learning from past, not repeating mistakes, learning from experience and applying it to other situations and turning surface learning into deep learning. This is used to record your progress throughout your study and can improve your performance by using the outcome of reflection to inform future practice [5].

### Reflective writing

It takes this a stage further by putting the reflection into the more permanent and structured format of a written account and linking it to academic theory. It links between theory and practice and between your past and present knowledge. Reflecting on and learning from your experiences can help you to avoid repeating mistakes and move away from acting automatically without thought. It will help you to identify the successful aspects of an experience, and any useful principles which can be applied to other situations. Reflective writing looks to the future. You need to show how your reflection on what happened in the past will inform your future practice. Your analysis of the experience should be linked to academic theory in order to give it credibility [5].

Reflective writing is evidence of reflective thinking. In an academic context, reflective thinking usually involves looking back at something, often an event i.e., something that happened, but it could also be an idea or object, analyzing the event or idea, thinking in depth and from different perspectives, and trying to explain, often with reference to a model or theory from your subject, thinking carefully about what the event or idea means for you and your ongoing progress as a learner. Reflective writing is thus more personal than other kinds of academic writing. We all think reflectively in everyday life, but not to the same depth as that expected in good reflective writing at university level.

Reflective thinking can be unstructured and still be very useful. It can be done in a personal diary. Genuinely reflective writing often involves 'revealing' anxieties, errors and weaknesses, as well as strengths and successes. It is normally necessary to select just the most significant parts of the event or idea on which you're reflecting. It is often useful to 'reflect forward' to the future as well as 'reflecting back' on the past [6]. This involves stepping back from events and actions and exploring your personal roles and interpretations [7].

### Features of reflective writing

Describing what happened and how you felt is only a small part of reflective writing. The emphasis as you write should be on your analysis and exploration of the experience. Reflective writing differs from most academic writing in that you will use the first person "I" to describe the experience and your feelings. Most reflective writing for

assignments will also include an academic element so you should write in the first person (e.g., "I felt"). As in academic writing, reflective writing requires the use of formal language; arguments supported by evidence, and fully referenced information resources.

Reflective writing can take different forms. It may be an assessed piece of work a diary or journal which is written solely for your own benefit, in which you record your thoughts and experiences about your learning experience on a regular basis [5].

Reflective writing can be more challenging than other forms of writing as it involves writing about feelings (anxieties and mistakes, as well as successes). Describing an event can help you to start writing. The next step is to then ask you questions about this event:

Description-What happened? Who was there? Interpretation/analysis-What did I feel? Why did I respond in the way I did? What are the most important/relevant aspects? How does it link to theory? What went well/what didn't? Outcome/evaluation-What have I learned? What would I change? [5].

Reflective writing should not just describe your learning experience, but record your thoughts and feelings about your learning, what you find difficult/easy, how you manage challenges, how your attitude towards learning has changed or developed. Feedback from teacher could be used to note any improvements in your work.

Try to stand back from the event and be as objective as possible. Be aware that your reflection on an event can change with the passage of time. As you reflect more and acquire more knowledge then your views may change. Your writing may also be affected by your emotional state at the time of your writing. Start to write as soon after the event as you can. Delaying your writing may make it difficult for you to recall exactly what happened and how you felt, so your account will not be entirely accurate. Select and use only key events and moments [5].

There are different formats used by different experts:

Example 1: Description-What happened? What is being examined?

Interpretation-What is most important/interesting/useful/relevant about the object, event or idea? How can it be explained e.g., with theory? How is it similar to and different from others?

Outcome-What have I learned from this? What does this mean for my future? [6].

Example 2: Description, emotions, outcomes, evaluations, analysis, conclusions [7].

It is usually perceived that academic assignments are rigid in their format or creativity is not allowed in this. Through reflective writing, students can bring creativity and innovation which makes learning more meaningful. Timothy et al. [8] did a study to explore perception of creativity in reflective writing. This study offers different strategies of support to students to enhance their skills related to reflection. Research done by Jase et al. [9] explored possible differences in reflective writing once guidelines were presented to a group of interns in the College of Education. Results showed that most students preferred to use the guiding question while writing their reflections. There was also a significant improvement in the quality of written reflections after reflection guiding questions were presented and used.

In a study done by Ozlem et al. [10] narrative reflections of students were categorized as avoidant, objective, committed and reflections with emotional exploration. Committed reflectors and emotional reflectors presented detailed and contextual information about their

performances and self-learning outcomes. Objective reflectors wrote only about daily events. There are attempts made by researchers to develop tools to measure degree of reflection of medical students. Boenink et al. used case vignettes for this [11]. There are different theoretical frameworks used for reflective writing. Gibb's and Kolb's models are widely accepted [12].

### Practice

The research conducted by Jase Moussa-`explored possible differences in reflective writing when guidelines were presented to a group of interns in the College of Education. Text analysis of written work samples were used to determine possible differences in reflective writing. Results showed that most students preferred to use the guiding question while writing their reflections. There was also a significant improvement in the quality of written reflections after reflection guiding questions were used.

### Assessing reflective practice

In the process of developing assessment tool, a definition was constructed by Boenink et al. as follows: showing a balanced approach, considering all relevant perspectives, weighing up different interests, showing a keen eye for dilemmas and uncertainties, paying attention to the patients viewpoint and demonstrating an evaluation of one's own position and latitude. A rubric for assessment was developed by some academics to avoid bias. But space was given for student's creativity and imagination. For this, team work of assessors would help. Rubric notes were kept for clarification in case of doubts of bias [13].

### Material and Methods

A cross sectional study was planned to find out perception, knowledge and practice of 'reflective learning and writing 'among interns in Academy of Medical Sciences Pariyaram.

### Study population

All the interns working in the Academy of Medical Sciences during study period (May 2016 to August 2016). There were total 72 interns, excluding those who changed internship to other hospitals. All of them were interviewed.

Appropriate sample size was calculated to know the precision of the sample available for the study. Since there are no similar studies, it was assumed that the prevalence of interns having optimum knowledge score on reflective learning is 50%. Considering 20% of relative precision, the formula for sample size is used as follows

$Z^2 \times p \times q/d^2$  where  $Z=1.96 \times 1.96$  (confidence interval),  $p=50\%$  (prevalence),  $q=100-p=50\%$ ,  $d=20\%$  of  $50=10$  (relative precision).

$$1.96 \times 1.96 \times 50 \times 50/10 \times 10=100$$

Calculated sample size was 100 and there were only 72. But the strength of the study was that personal interview was conducted with all the study subjects using a semi-structured interview schedule.

### Data collection tool

A pre-tested semi-structured format/interview schedule was used. Interview schedule was prepared based on the subject through review of literature. Quality of the schedule was checked by a check list

developed as guided by literature [14,15]. Schedule was validated by peer review. A pilot test was done and it was standardized.

There were closed ended questions as well as open-ended questions in the interview schedule. For closed ended questions, scores were given for each item. Likert scale was used for this. Scoring sheet was prepared based on the degree with which answers matched with expected answers. For the open ended question answers, key words were listed out and score was given. Additionally, content analysis also was done.

Interview followed a mixed method approach incorporating qualitative elements also. There was probing based on the answer given for open ended questions. This could elicit more responses from the participants regarding their perception, knowledge and practice of reflective learning. Interviewee got more chance for clarifying questions. At the same time care was taken not to get any desirable answers by bias. This was done by sequencing the questions in such a way that participant did not get a clue of the desirable answers. They were also assured that there would not be any value judgments.

### Data collection method and procedure

Interview was conducted by the investigator herself after taking consent and explaining the purpose of study to each participant. Each interview took about 25-30 minutes

### Data analysis

Data was entered in excel sheet for quantitative analysis: SPSS version 13 was used for data analysis. Descriptive statistics i.e., Frequency, Percentage, Range, Median and Inter-quartile range was applied. Also, inferential statistics i.e., Mann Whitney U test and chi square were used.

Answers from open ended questions were subjected to content analysis. Segmentation and open coding was done initially based on concepts developed by review of literature. These were grouped into categories by constant comparison. Themes were developed from categories and interpretation was done.

### Ethical consideration

The project got clearance from IEC of the institution. Informed consent was taken from each participant. Since the participants were interns working under supervision of the investigator it was made clear that participation is purely on voluntary basis and s/he will not be valued or judged based on the answer given (Others include CBSE and ICSE).

### Results

#### Demographic profile

Sex	Frequency	Percent
Male	23	31.94
Female	49	68.06
Total	72	100

Table 1: Distribution based on sex.

Syllabus	Frequency	Percent
State	35	48.61
Others	37	51.39
Total	72	100

**Table 2:** Distribution based on school syllabus.

**Perception score:** Perception score in the study can vary between 12 to 60. This range is divided into 2 equal halves, namely-12 to 35 (denoting unsatisfactory perception) and 36 to 60 (denoting satisfactory perception). So, perception score has been converted into 2 groups-satisfactory and unsatisfactory perceptions (Tables 1-3).

Perception group	Frequency	Percent
Unsatisfactory	3	4.17
Satisfactory	69	95.83
Total	72	100

**Table 3:** Distribution of perception group.

**Knowledge score:** Knowledge score in the study can vary between 16 to 80. This range is divided into 2 equal halves, namely-16 to 47 (denoting unsatisfactory knowledge) and 48 to 80 (denoting satisfactory knowledge). So, knowledge score has been converted into 2 groups satisfactory and unsatisfactory knowledge (Tables 4-8).

Knowledge group	Frequency	Percent
Unsatisfactory	1	1.39
Satisfactory	71	98.61
Total	72	100

**Table 4:** Distribution of knowledge group.

Selected questions on knowledge denoting subjective element.

Score	Frequency	Percent
3	5	6.94
4	51	70.83
5	16	22.22
Total	72	100
Median	4	

**Table 5:** Understanding of one's own behaviour is relevant in reflective writing.

Score	Frequency	Percent
3	7	9.72
4	49	68.06
5	16	22.22

Total	72	100
Median	4	

**Table 6:** Reflective learning is more personal than other types of learning.

Score	Frequency	Percent
1	7	9.72
2	18	25
3	7	9.72
4	35	48.61
5	5	6.94
Total	72	100
Median	4	

**Table 7:** Bringing one's feelings in learning is not good in academics.

Score	Frequency	Percent
2	2	2.78
3	8	11.11
4	36	50
5	26	36.11
Total	72	100
Median	4	

**Table 8:** Using first person in academic writing is wrong.

**Practice score:** Practice score in the study can vary between 6 to 30. This range is divided into 2 equal halves, namely-6 to 17 (denoting unsatisfactory practice) and 18 to 30 (denoting satisfactory practice). So, practice score has been converted into 2 groups-satisfactory and unsatisfactory practices (Tables 9-12).

Practice group	Frequency	Percent
Unsatisfactory	68	94.44
Satisfactory	4	5.56
Total	72	100

**Table 9:** Distribution of practice group.

		Male	Female
Knowledge	Median	56	59
	IQR	9	5
Perception	Median	45	44
	IQR	7	5
Practice	Median	10	12

	IQR	6	5
--	-----	---	---

**Table 10:** Gender wise distribution of scores.

There was no significant difference between males and females in all 3 domains (Using Mann Whitney U test).

		State	Others
Knowledge	Median	60	58
	IQR	9	6
Perception	Median	45	43
	IQR	5	6
Practice	Median	11	12
	IQR	6	6

**Table 11:** Syllabus wise distribution of scores.

There was no significant difference between the state and other syllabus in all 3 domains (Using Mann Whitney U test).

Perception group				
		Unsatisfactory	Satisfactory	Total
Knowledge group	Unsatisfactory	0	1	1
	Satisfactory	3	68	71
	Total	3	69	72

**Table 12:** Association between knowledge and perception.

Of those who had satisfactory knowledge, 95.8% had satisfactory perception (Table 13). The association between knowledge and perception was not significant (Using chi-square test).

Practice group				
		Unsatisfactory	Satisfactory	Total
Knowledge group	Unsatisfactory	1	0	1
	Satisfactory	67	4	71
	Total	68	4	72

**Table 13:** Association between knowledge and practice.

Of those who had satisfactory knowledge, 94.4% had unsatisfactory practice (Table 14). The association between knowledge and practice was not significant (Using chi-square test).

Practice group				
		Unsatisfactory	Satisfactory	Total
Perception group	Unsatisfactory	3	0	3
	Satisfactory	65	4	69

	Total	68	4	72
--	-------	----	---	----

**Table 14:** Association between perception and practice.

Of those who had satisfactory perception, 94.2% had unsatisfactory practice. The association between perception and practice was not significant (Using chi-square test) Selected Questions related to perception (Tables 15-17).

	Frequency	Percent
1	14	19.4
3	50	69.4
5	8	11.1
Total	72	100
Median	3	

**Table 15:** I was not doing reflective writing because.

	Frequency	Percent
1	1	1.4
2	7	9.7
3	3	4.2
4	55	76.4
5	6	8.3
Total	72	100
Median	4	

**Table 16:** Do you think including reflective writing in undergraduate curriculum is useful? Explain.

	Frequency	Percent
1	9	12.5
2	5	6.9
3	2	2.8
4	55	76.4
5	1	1.4
Total	72	100
Median	4	

**Table 17:** Can you use reflective writing in log book? Give reasons.

### Content analysis

Content analysis was done for the descriptive answers given for a couple of questions. Open coding was done based on the concepts developed from review of literature. They were grouped into various categories. The categories are given in the Tables 18 and 19.



Category	No. of participants similarly responded*
1. Learning from past experience and using it in future	13
2. Analysing what is learned and using it	15
3. That helps us to understand mistakes	9
4. That makes improvement	5
5. Understanding oneself while learning	5
6. Thinking on what we do	5
7. Observe our feelings while learning	2
8. Learning by observing what others do	11
9. Make notes of what we do	1
10. What we memorise from learning	1
11. Teaching through demonstration	1
12. No idea	8
*Not mutually exclusive	

**Table 18:** Question: What do you understand by reflective learning? Describe in 2-3 sentences.

Category	No. of participants similarly responded*
1. Can correct our mistake and improve	22
2. Can assess ourselves and improve	10
3. Can bring attitudinal change in ourselves	20
4. Can improve our skill and performance in career	32
5. Learn from past and apply it in future	7
6. Can improve our analytical skills	12
7. Can improve our theoretical understanding	5
8. Helps in standardization of practice	3
9. Helps to develop a vision	2
10. Can have different perspectives of same thing	1
11. Can share with other doctors	5
12. Can share with students	1
13. Can improve patient's attitude	1
14. Will be useful in pain and palliative care	1
15. Do not know	1
*Not mutually exclusive	

**Table 19:** Question: How reflective learning and writing will be helpful in your professional life?.

## Discussion

This study was initiated with the assumption that there are inadequacies in the perception, knowledge and practice of reflective writing among the medical graduates. Based on these assumptions objectives and study tools were prepared. Interview was conducted among 72 interns who were doing internship in Pariyaram Medical College during the study period (May 2016 to August 2016). There were 49 (68.06%) female interns and 23 (31.94%) male interns. Based on their school syllabus, they were categorized into state and others. Others include CBSE and ICSE. 35(48.61) studied in schools with state syllabus while 37 (51.39%) studied in others.

## Perception score

Items for Perception score, Knowledge score and practice score assessment were selected, based on the literature. Perception covered areas like attitude of the intern to dedicate time for reflection, intellectual honesty, willingness to reflect, receptiveness, reasoning on the topic, readiness to change towards the new method etc. Results show that 69(95.83%) of interns have satisfactory score in perception about reflective learning and writing. This means that if reflective learning and writing is introduced into curriculum, it may be accepted well.

## Knowledge score

Knowledge score covered inclusion of subjective element in learning, introspection, self-understanding, feelings, experience, student-centeredness, patient-centeredness, accepting dilemma, connecting theory and practice, context, multiple perspectives etc. Results show that 71(98.61%) students have satisfactory knowledge about reflective learning and writing. This means that it will be comprehensible and feasible, if we introduce reflective learning and writing into medical curriculum.

Including subjective elements like feelings is significant in reflective learning. So, a few questions related to this were analyzed separately to know about the understanding of interns in this regard. Selected statements are, [1]. Understanding of one's own behavior is relevant in reflective writing; [2]. Reflective learning is more personal than other types of learning; 3. Bringing one's feelings in learning is not good in academics; 4. Using first person in academic writing is wrong.

Analysis show that there is nuanced understanding within this category of bringing subjective elements in learning. To the first question related to understanding one's own behavior in reflective learning, 92.22% of interns got >3 score in Likert scale. Second statement brings out how personal you want to consider academic learning. To this also 90% got >3 score in Likert scale. Fourth statement is related to using first person in academic writing which is unusual in our conventional practice. For this 86% got >3 score in Likert scale. Third statement brought the element of feeling, for which 63% got >3 in Likert scale. This shows that bringing feelings into academic learning have more reservation compared to other subjective elements. At the same time majority of interns have good knowledge on this?. While introducing this in curriculum, these nuances can be considered.

### Practice score

Practice score covered practice of writing log book, diary, portfolio, and being reflective in work and writing. Only 4 (5.56%) interns had satisfactory practice where as 94.4% did not have satisfactory practice of reflective learning. This means that though interns have proper knowledge and perception regarding reflective learning, they are not practicing it. It is evident that, they are not practicing it because it is not included in the curriculum. The study provides us hope that it will be accepted by students and interns if it is introduced because they have appropriate perception and knowledge.

There was no intra-group variation because >90% of participants have same score in all three domains. It was noted that there was no gender difference in any of the three scores in. This was same with different types of school syllabus also in all three domains.

**Association between knowledge and perception:** It is observed that those who have good knowledge also have positive perception about reflective learning. Out of those who had satisfactory knowledge, 95.8% had satisfactory perception.

**Association between knowledge and practice:** There was no association between knowledge and practice of reflective learning and writing. Out of those who had satisfactory knowledge, 94.4% had unsatisfactory practice.

**Association between perception and practice:** No association between perception and practice was observed. Out of those who had satisfactory perception, 94.2% had unsatisfactory practice.

On contrary to the presumption, interns have good knowledge and positive perception about reflective learning and writing. But they do not practice it. Reason may be that they have not been guided to do it. From knowledge and perception we can assume that there will be good acceptance, if we introduce reflective learning and writing in the curriculum. To the question, whether you will be interested to do reflective writing, if you are guided to do it, 93% replied that they would be. Answer given to the reason for not doing reflective writing also shows a positive attitude. 8 (11.1%) thought that they already applied it, without knowing that they were doing it. 50 (69.4%) told

that they were not doing it because they were not instructed to do it. 14 (19.4%) thought they did not have time for it. 61(84.7%) told that it will be useful, if reflective learning is introduced in undergraduate curriculum. 56(77.8%) told that reflective writing can be used in log book of interns. All these show that reflective learning can be accepted well if we introduce it in curriculum with proper training.

### How reflective learning is understood by interns?

Quantitative data gave a picture of the level of knowledge, perception and practice of reflective learning among interns. This can be further substantiated by content analysis of the narratives given by interns as answer to the open ended questions and further probing. The concepts evolved were grouped thematically into categories. Understanding about reflective learning and writing by the interns are classified as follows.

1. Closer to the definitions and features of reflective learning and writing. Majority of the interns brought this idea

- Analyzing what is learned and using it during work.
- Learning from past experience and using it in future.
- That helps us to understand mistakes.
- That makes improvement in our career.
- Understanding one while learning.
- Thinking on what we do.
- Observe our feelings while learning.
- Make notes of what we do.
- What we memories from learning.

2. Not close to the idea of reflective learning.

- Learning by observing what others do.
- Teaching through demonstration.

3. No idea

Eight interns told that they do not have idea about reflective learning from the above narrations it can be inferred that majority of interns have good knowledge and perception about reflective learning as shown by quantitative analysis.

### Introducing reflective learning and writing in medical curriculum

As previously presented majority of interns do not practice reflective writing, but they are willing to do it if they are trained. Also they consider it is useful in the medical career. To substantiate this, their answers to the question 'how it will be helpful to the profession' were analyzed. Content of their answers is listed below.

- Can correct our mistake and improve our career.
- Can assess ourselves and improve in profession.
- Can bring attitudinal change in ourselves.
- Can improve our skill and performance in career.
- Learn from past and apply it in future.
- Can improve our analytical skills.
- Can improve our theoretical understanding.
- Helps in standardization of practice.
- Helps to develop a vision.
- Can have different perspectives of same thing.
- Can share with other doctors.

- Can share with students.
- Can improve patient's attitude.
- Will be useful in pain and palliative care.

Interns' ideas match with that of experts. Gibb's reflective cycle brings the idea of analysis; improvement in practice, learning from past experience, understanding mistakes, improving skills etc., [12] Interns' ideas also matches with this. Reflection also promotes personal development and growth and can help a student to integrate knowledge, skills, attitudes, and values [2].

The study shows that interns were answering to the question with their own reasoning, which is closer to the idea of reflective learning. This also strengthens the idea that there will be acceptance for reflective learning, if it is formally introduced in curriculum.

At the same time many other important features of reflective learning is not brought out by the students. Objective of our activities, how context of an event is influential, what does patient feels, ethical concerns etc. were not brought out in their narrations. These factors were underlined in the guidance developed by experts [8]. So, proper training and guidance have to be given while it is introduced in the curriculum.

## Conclusion

Interns in ACME, Pariyaram have good knowledge and positive perception towards reflective learning and writing. They have substantiated it with reasoning. But they do not practice it because it is not included in curriculum. Majority of them think that they would do it if they are guided to do it. Most of them think that reflective learning can be included in undergraduate curriculum and log book writing during internship. They think that it will help in the progress in profession, improve performance and enhance positive attitude towards patients. They also think that mistakes can be avoided and learning can be used in future. It can be concluded that there will be acceptance from the side of students, if reflective learning is introduced in curriculum and proper guidance is given. This can be part of competency based medical education.

## References

1. Regulations on Graduate Medical Education (2012) Medical Council of India. New Delhi.
2. Reflective Writing: a basic introduction (2012).
3. Oxford English Dictionary (2012).
4. Learning and Information Services (2012) Guide to reflective writing Wolverhampton: University of Wolverhampton.
5. Guide to Reflective Writing (2014) LS006, Skills Development Team, University of Wolverhampton.
6. Hampton M (2015) Reflective writing: a basic introduction. Department for Curriculum and Quality Enhancement, University of Portsmouth.
7. Portfolio Section 3, Presentations and Reflective Practice: A Guide to Reflective Practice.
8. O'Connell TS, Dymont JE, Smith HA (2015) Students' Appropriation, Rejection and Perceptions of Creativity in Reflective Journals. *International Journal of Teaching and Learning in Higher Education* 27: 1-3.
9. Moussa-Inaty J (2015) Reflective Writing through the Use of Guiding Questions. *International Journal of Teaching and Learning in Higher Education* 27: 104-113.
10. Sarikaya O, Nalbant H (2014) Medical Students' reflections on first clinical experience. *Medical practice and review. Academic Journals* 5: 31-35.
11. Boenink AD, Oderwald AK, De Jonge P, Van Tilburg W, Smal JA (2004) Assessing student reflection in medical practice. The development of an observer-rated instrument: reliability, validity and initial experiences. *Medical Education* 38: 368-377.
12. Gibb's Reflective Cycle.
13. Kennison MM, Misselwitz S (2002) Evaluating reflective writing for appropriateness, fairness, and consistency. *Nursing Education Perspectives* 23: 238-242.
14. Steinar K (1996) Interviews: An Introduction to Qualitative Research Interviewing. Sage Publications.
15. Flick U (2012) An Introduction to Qualitative research. Sage Publications.