Reflection Diary in Development of Experiential Learning Skills among Student Nurses

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ABSTRACT

As psychiatric nursing practice is an interaction between a psychiatric nurse and mentally ill patient so we interact with mentally ill patient by listening, observing the behavioral out-comes like aggression, hallucination, delusion and identification of suicidal thought etc. Reflection is a process of reviewing an experience of practice in order to describe, analyze, evaluate and so inform learning about practices. It is difficult to share by an instructor’s own experience and teach the symptoms of mentally ill patients i.e. aggression, suicidal thoughts, hallucination, delusion to the novice psychiatry nursing students who would not merely exposed to real life experience. Quasi-experimental design with 2 groups each consists of 15 participants and an III learning group with 20 subjects was assessed for pre-experiential learning skills before training session was done by control I and experimental II groups. The result showed that the use of reflection diary was excellent in development of experiential learning skills and learned detailed of abstract symptoms like aggression, hallucination, delusion and identification of suicidal thought etc easily.

Key words: Reflection diary (RD); Experiential Learning Skills (ELS); mentally ill patients.

INTRODUCTION

The ability to engage in reflection practice is basic to competent professionals, and training in reflection practice is therefore an important element in professional education.

In the early 1980's, Mezirow, Freire and others stressed that the heart of all learning lies in the way we process experience, in particular, our critical reflection of experience. They spoke of learning as a cycle that begins with experience continues with reflection and a later lead to action, which itself becomes a concrete experience for reflection (Rogers, 1996). For example, a teacher might have an experience encounter with an angry student who failed a test. This is the experience. Reflection of this experience would involve trying to explain it to oneself: comparing it to previous experiences to determine what is the same and what is unique, analyzing it according to personal or institutional standards, and formulating a course of action connected to the experiences of others, such as talking to other teachers who have also faced angry students. Talking to other teachers, the action, will then lead to further reflection. (Coffield F et al. 2008)

Kolb further refined the concept of reflection by dividing it into two separate learning activities, perceiving and processing. (Algonquin, 1996). He thus added another stage, called "Abstract Conceptualization." Whereas in the Critical Reflection stage we ask questions about the experience in terms of previous experiences, in the abstract conceptualization stage, we...
try to find the answers. We make generalizations, draw conclusions and form hypotheses about the experience. The ‘Action phase’, in light of his interpretation, then becomes a phase of “Active Experimentation”, where we test the hypotheses.

Experiential learning theory defines learning as "the process whereby knowledge is created through the transformation of experience. Knowledge results from the combination of grasping and transforming experience" (Kolb 1984).

To facilitate the development of the experiential learning skills (EPS) by reflection diary, many professional education programmers engage students in writing reflection diary as one of the learning activities. The literature indicates that reflective diary writing enhances reflection, critical thinking, integration of theory with practice, and promotes professional growth among students. Writing reflection diary do not only provide evidence of understanding of content knowledge, reflection, professional judgment and application, but also enhance critical self-reflection, self-awareness and develops experiential learning skills among students. (Morgan TC 2000)

Thus reflection diary will help to develop critical thinking, self-awareness and analytical skills. Reflection diary can help student nurses to inform what worked or didn't work, what might need to be done differently, or how individuals may need to develop their behavior or practice. (Coffield F et al. 2008)

Most of the time psychiatric nursing student does not like to talk/interact with mentally ill patient in hospital due to many abnormal behavior and conditions like aggression, abusiveness, irritability, anxiety, hyperactivity etc. Here by reflection diary plays a major role to motivate and initiate student nurses to interact with mentally ill patients comfortably in any circumstances. So, the reflection diary will help the psychiatric nursing students to reflect on their experience in much effective way and write it in reflection diary. Experiential learning skills will develop by regular practice on writing a reflection diary, which will develop a stable learning.

MATERIALS AND METHODS

Aim and objectives

The aim of this study was to develop experiential learning skills by using reflection diary among student nurses who were trainee in the psychiatric settings and undergoing baccalaureate nursing program and post basic nursing program, no trainee nurse were excluded from this study, hence will help to develop critical thinking, self-awareness and analytical skills.

Objectives of the study was to assess the experiential learning skills among nursing students of control group I and experimental group II after experience selected events/situations without reflection diary, To assess the experiential learning skills among nursing students of experimental group II after experience selected events /situations with the reflection diary, To assess overall effect of learning through reflection diary by learning group (III) after receiving learning from control group I and experimental group.

Design

Quasi-experimental, pre test and post test control group design was used to assess the effectiveness of reflection diary and training of the trainers. Introduction of the learner group III to assess the effect of experiential learning skills.

Participants

Study was conducted on 50 student nurses who were posted in psychiatric setting during their clinical exposure. The 15 subjects in the control group I without reflection diary and 15 subjects in experimental group II with reflection diary who met the inclusion criteria. 20 subjects of learning groups III were assessed pre-experiential learning skills and training session was done by control I and experimental II groups.

Setting

Study was conducted in the inpatient
psychiatric unit of a multispecialty teaching hospital the institution consists of 3 units namely general psychiatry unit, family block and the De addiction center. Data collection was carried out in the above mentioned wards in the in-patient department.

**Recruitment**

The participants were selected by random sampling technique. The subjects consist of three groups respectively control group-I, experimental group-II and learning group-III.

In the present study, student of five nursing colleges had posted in different psychiatry units during the data collection period, the investigator selected 50 student nurses by lottery method from 150 student nurses were posted during data collection period. Among those 50 selected student nurses group-I, group-II, & group-III by tossing the coin respectively. This procedure was not repeated because all the selected participate were agreed & signed the informed consent.

**Data Collection Instruments**

In this study data collection method was used by following instruments of baseline data of student nurse, Checklist to assess experiential learning skills learned through experience, Rating scale to assess the effect of reflection diary in development of experiential learning skills of student nurses.

**Procedure**

The investigator directly approached the student nurses and selected them on the basis of inclusion criteria. The investigator introduced him to the subjects; the purpose of the study was explained to them. Confidentiality was assured and informed consent was obtained.

A compulsory 4 days real experience had been given to both the group reflection process had been started with these groups. After completing about 4th days continuous real experience with the reflection diary and without reflection diary. A post check list tool of experiential learning skills was given to both the groups. At 5th day sharing session was obtained in presence of investigator to experimental group-I and 6th day respectively with the control group-II. 7th day 20 subjects of learning groups (group-III) were assessed by pre- check list of experiential learning skills were obtained after experiencing/ interacting certain situation of the client with conditions (Auditory hallucination, delusion, suicidal ideation & aggression).

A learning session on 8th day given by control group-I to learning group-III by providing real experience of client events/situation with different condition (Auditory hallucination, delusion, suicidal ideation & aggression etc.).

A very next day 9th day learning session followed by experimental group-II to learning group-III by providing a reflective real experience, which is gained by writing a daily reflection diary and sharing session about certain events/situation of client with (Auditory hallucination, delusion, suicidal ideation & aggression etc.) different conditions. After which a post-experiential learning skills score check list and rating scale to assess the effect of reflection diary (RD) was obtained by learning group-III.

**Ethical issues**

Ethics approval to conduct the study was obtained from the Institutional Ethical Committee. The voluntary nature of research was explained to each participant, and issue of privacy and confidentiality were discussed. Participants were assigned a number to keep their identity confidential. Trial was registered to government trail registry prior to the first enrolment.

**Data Analysis**

The data was analysed and presented by the following headings: Description of baseline characteristics, Pre-Experiential learning skills of nursing students without using reflection diary, Post-Experiential learning skills of nursing students with the reflection diary, significant difference in the development in experiential learning skills score of control group I, experimental group II and learning group III student nurses,
Effect of reflection diary in development of experiential learning skills and Association between effect of reflection diary and selected baseline variables.

RESULTS
Pre-Experiential learning skills of nursing students without reflection diary

The data showed the result that the pre-experiential learning skills (ELS) of nursing students without using reflection diary (RD). In control group-I satisfactory was found to be 13% and poor was 87% and in experimental group-II satisfactory was found to be 34% and poor was 66%.

Post-Experiential learning skills of nursing students with the reflection diary

The data showed the result that the post-experiential learning skills (ELS) of nursing students without using reflection diary. In control group-I excellent was found to be 13%, good was 20%, satisfactory was 27% and poor was 40% and in experimental group-II excellent was found to be 20%, good was 47% and satisfactory was 33%.

### Table 1: Mean Standard deviation and ‘p’ value of the Control group (I), Experimental group (II) and Learning group (III), experiential learning skills (ELS) scores.

<table>
<thead>
<tr>
<th>Groups</th>
<th>ELS score</th>
<th>Mean ± SD</th>
<th>Mean Difference</th>
<th>t value</th>
<th>p value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Control Group (I)</td>
<td>Pre-ELS</td>
<td>3.5 ± 2.3</td>
<td>8</td>
<td>6.06</td>
<td>&lt;0.001*</td>
</tr>
<tr>
<td></td>
<td>Post-ELS</td>
<td>11.5 ± 6.5</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Experimental group (II)</td>
<td>Pre-ELS</td>
<td>3.6 ± 2.9</td>
<td>14.4</td>
<td>12.4</td>
<td>&lt;0.001*</td>
</tr>
<tr>
<td></td>
<td>Post-ELS</td>
<td>18.3 ± 4.5</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Learning Group (III)</td>
<td>Pre-ELS</td>
<td>3.6 ± 2.8</td>
<td>11.5</td>
<td>10.3</td>
<td>&lt;0.001*</td>
</tr>
<tr>
<td></td>
<td>Post-ELS</td>
<td>16.5 ± 4.8</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*p<0.05 is considered as statistically significant (* significant)

H1: There will be a significant difference between experiential learning skill among the nursing students of using reflection diary and not using reflection diary.

The data showed that the use of reflection diary (RD) was excellent in development of experiential learning skills (ELS) in experimental group (II).

Significant difference in the development in experiential learning skills scores of the control group (I) Experimental group (II) and Learning group (III) student nurses.

H1: There will be a significant difference between experiential learning skill among the nursing students of using reflection diary and not using reflection diary.

The data showed the result that the mean pre-test of control group-I, experimental group-II and learning group-III, Experiential learning skills (ELS) score was lower than the mean post-test experiential learning skills (ELS) scores. The calculated ‘t’ value of control group-I (t = 6.06), experimental group-II (t = 12.4) and learning group-III (t = 10.3) (t = 6.06) was lesser than table value at 0.05 level of significant. Hence the null hypothesis is rejected and research hypothesis is accepted.

Comparison of mean gain of experiential learning skills scores among control group, experimental group & learning group

ANOVA test showed that there was
a statistically significant difference between experiential learning skills (ELS) scores between control group (I), experimental group (II) and learning group (III) treatment, where F value =6.6, p = 0.003, with a mean gain experiential learning skills (ELS) score of 7.9 for control group (I), 14.4 for experimental group (II), and 11.5 for learning group (III).

At the $\chi = 0.05$ level of significance, there exists to conclude that there is a significant difference in experiential learning skills (ELS) scores of control group (I), experimental group (II) and learning group (III).

**Effect of reflection diary in development of experiential learning skills**

This instrument was used to analysis and interpret the data in order to evaluate the effect of the reflection diary (RD) in development of experiential learning skills (ELS) which was rated by learning group (III) after getting real experience without reflection diary & with Reflection diary from control group (I) & experimental group (II).

The result shows that use of reflection diary (RD) was excellent in development of experiential learning skills (ELS) in experimental group (II).

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**DISCUSSION**

The present study intends to find the effect of Reflection Diary in development of Experiential Learning Skills among student nurses.

A study was conducted on reflective diaries in medical practices in Great Britain. Diary discusses its use by health professionals to exercise reflective learning. There are several steps to achieve systematic and useful reflective learning. Like reflective diary entries adapted from a medical practitioner: Value of the use of a diary for recording reflective learning experiences for professional development and maximization of career potential. (Caroline Eyles)

A similar qualitative study was conducted on Reflective journal writing: how it promotes reflective thinking in clinical nursing education: a students' perspective. Self-evaluation leading to intellectual growth and self-awareness indicated a positive perception. Negative perceptions were that reflective journal writing is time consuming, content based with a lack of clear expectations from the teacher, and distrust of students about the
information written. Results concluded that reflective journal writing in clinical nursing education does promote reflective thinking and learning. (MM Chabeli)

A similar quasi-experimental study was conducted on “The role of analogy-guided learning experiences in enhancing students' clinical decision-making skills”. The purpose of this study was to address the need for effective educational interventions to promote students' clinical decision making (CDM) within clinical practice environments. The researcher-designed Assessment of Clinical Decision Making Rubric was used to assess indicators of CDM ability in all students' reflective journal entries. Results indicated that the intervention group demonstrated significantly higher levels of CDM ability in their journals compared with the control group. (Edelen BG)

A study conducted in Malaysia on “diary: a reflective tool on an INSET language course”. The teachers kept diaries of their language learning experience, which were analysed according to the themes of barriers to learning and supports to learning. Within this framework it was found that teachers reflected inwards on their own language learning processes and on themselves as teachers. The reflected outwards on the learning processes of their students and on the teaching process in relation to themselves as adult learners. The result shows that diaries may provide an effective tool in encouraging INSET teachers to link theory and practice in second language learning, and to reflect in more depth on the language learning process at a group and individual level. (Helen Woodfield)

A qualitative study was conducted on reflective journal—a tool for enhancing experience-based learning in nursing students in clinical practice. 13 students of 2nd and 3rd year graduation course were invited to write daily, for 15 consecutive days. The journals were analyzed by Mezirow levels of reflectivity, later the group of students was invited to take part in a focus group to share and discuss their experience. The findings showed that keeping a journal helps students to effectively enhance their experiential learning during the training period. (Bagnato Silvia)

This helped the investigator to prove that writing reflection diary do not only provide evidence of understanding of content knowledge, reflection, professional judgment and application, but also enhance critical self-reflection and self-awareness and develops experiential learning skills among students.

CONCLUSION

The present study highlights the effectiveness of reflection diary and development of experiential learning skills.

A study was conducted on making compartmentalized learning a history through reflective diary writing in Malaysia. Samples were final year course student, so here learners are expected to apply previous linguistic knowledge to this course. However, learners had difficulties in relating previous knowledge to what they were learning. This paper presents the intervention made to assist learners recall what they have learned and to not compartmentalise their knowledge. Results purely suggest that learners who reflected meaningfully in their reflective diary writing can relate the knowledge they were acquiring to their previous knowledge better than those who did not. This suggests reflective diary writing can help learners decompartmentalise their learning. (Patricia A)

Thus students experience by Reflection diary will form the real life experience thus development of experiential learning skills take place & in return teacher will share, generalize and validate it by transforming to students.

Limitation

Present study is limited to Basic Hons Nursing and Post Graduate Nursing students. Study is limited to the students, posted during the time of data collection.
The data collection tools used in the investigation was prepared for the study purpose and was used for the first time. Hence the available time did not permit extensive standardization of the tool.

Declaration of conflicting interest
The author(s) declared no potential conflicts of interest with respect to the research authorship, and/or publication of this article.

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