Use of Direct Observation of Procedural Skills (DOPS) As An Evaluation Tool For Workplace Based Teaching Among The Surgical Postgraduate Residents In The Surgical O.P.D. in The Rural Hospital.

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ABSTRACT

Introduction: Direct observation of procedural skills has been designed specifically for the assessment of practical skills and gives feedback to the trainee conducted at work place. The present study was planned to use it to assess the Surgical Postgraduate Resident's skills in the clinical examination of breast in the surgical O.P.D. 12 surgical postgraduate residents enrolled and gave consent. Pre and post test was taken by questionnaire at workplace. The female patient attending the surgical OPD was given for examination. The assessor observed the resident and noted his findings as per DOPS form and check list. 12 residents were assessed by 4 assessors by DOPS for 4 months, and the results were analyzed.

DOPS assessment scores of satisfactory nature varied between 70 to 90% and need improvement from 10-30%. Acceptability of DOPS as an assessment method was 100% for the assessors.

1) Introduction:

In surgery practical knowledge and skill are important. The psychomotor skills of the trainee reflect in the assessment. The feedback in the form of numerical marks is not beneficial, narrative and specific feedback needed. DOPs has the unique combination of assessment and feedback. The formative assessment methods that require observation and feedback are required. DOPs are considered to assess the clinical performance according to third and fourth level of Miller's pyramid. Workplace-based teaching and assessment is now widespread across all specialties and all stages of training. In this project implementation of DOPs was done in four sessions. The study was conducted in the surgical O.P.D. of PRH, Loni. The observations and results were noted. The DOPs is a method of assessing the clinical skills and giving feedback. It is a simple modification of traditional oral examination.

Ideal Approach

- Residents should arrive at the diagnosis on the clinical evaluation of the patients.
- They should become lifelong learners.

1.2 Innovation

Implementation of DOPs was adapted to achieve this goal.

2) Material and Methods:

Assessment was done by DOPs (Direct observation of procedural skills).

A) Evaluation plan:

- Assessment plan
- Pre-project questionnaire from the faculty and surgical postgraduate residents. (Table no.1)
- The DOPs method was introduced to the surgical faculty members (accessors) and postgraduate residents (trainees) in the form of lecture and video.
- Training was given to the accessors about how to use the checklist and the rating form.
- Demonstration of the clinical examination in the real life patients.
- Interval feedback was taken from the accessors and the trainees.

B) Supports:

- Approval from the Ethical Committee.
- Permission of HOD and Principal, Rural Medical College & Hospital, Loni.

C) Resource Gathering:

- Surgical faculty members.
- 12 surgical post graduate residents.
- Peer review of documents.
- Consent of residents.

D) Plan of implementation:

- 4 surgical faculty members and 12 residents participated voluntarily in the project. The period of study was from October 2014 to April 2015 in the surgical O.P.D. PRH, Loni.
- 16 sessions were spread over 4 months – 4 days/month for
Steps:
- Total time - 20 minutes
- Evaluation by direct observation and using standard check list and rating form (5 mins)
- Constructive one on one feedback
- Positive feedback was followed by some focus on constructive feedback (10mins)
- Specific feedback
- Written feedback was given
- After agreeing on specific educational plan, the trainee and accessor signed the form.

Table No.1: Pre-project Questionnaire for Faculty and Resident

<table>
<thead>
<tr>
<th>Sr. No.</th>
<th>Questions</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
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<tbody>
<tr>
<td>1</td>
<td>Residents face difficulty in reaching diagnosis in OPD.</td>
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<td>2</td>
<td>Residents take brief history and send the patient to the investigations.</td>
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<td>3</td>
<td>Residents do not do clinical examination properly.</td>
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<tr>
<td>4</td>
<td>Investigations used as primary tool to arrive at diagnosis.</td>
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</tbody>
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1-Strongly Agree
2- Agree.
3- Neither agree nor disagree.
4- Disagree.
5- Strongly disagree

3) Observations:

Figure 1: Graph showing no. of students agreed (Pre-project Feedback)

All students agreed that in the OPD it is difficult in reaching diagnosis. Nobody agreed that they are using investigations as primary tool to arrive at diagnosis.

Figure 2: Graph showing no. of assessors agreed (Pre-project Feedback)

Assessors agreed that in the OPD it is difficult to reach the diagnosis. All agreed that residents are using investigations as primary tool to arrive at diagnosis. Interval feedback was done by questionnaire to assessors and students.
All the residents agreed that this is a different method. They are comfortable with this method in OPD. This method helped them to improve their clinical skills and knowledge. All would like to continue this method in future.

4) Results:
The use of formal assessment method DOPs of surgical postgraduate residents in ambulatory setup of surgery OPD has positively contributed in achieving objectives of developing thought process to reach provisional diagnosis by utilizing history and clinical examination. The commitment part is to encourage them to read more and to increase their contact time and interaction with the patients.

5) Discussion:
The present study highlights the need of CME activities for residents. While teaching them in O.P.D., their queries are answered and technical skills are enhanced under the guidance of senior teaching faculty. The assessment of these sessions showed promising results. Residents would like to have more such sessions covering important topics. The assessors felt that assessment by DOPS needed a lot of planning, but was more effective method. 6% of the residents felt that there was some degree of stress while they were being assessed when they were managing the patients. They all felt that this practice should be continued on a regular basis. Similar observations have been made in Sahelbalzamani et al from Iran, Cohen et al and Miller et al in their study. They have reported the positive effects of DOPS on performance of students.\(^{(5,6)}\)

6) Conclusion:
- DOPs is a reliable, valid and acceptable method of formal assessment.
- It helps the surgical postgraduate residents to improve their clinical skills.
- It empowers the residents to arrive at the diagnosis on their clinical skills with minimum relevant investigations.

7) Limitations:
A drawback of DOPS is that it evaluates a specific encounter. The feasibility of DOPS can be influenced by the availability of the patient. Both learner and assessor must make sure that they have been allocated a suitable length of time to perform DOPs. Assessment is found to take 5 – 15 mins followed by feedback for five minutes. In reality, a number of residents found that they require a longer time period.

References: