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## Perception of Physiotherapy Students towards' Institutional Based Assessment Proforma for Patients: An Observational Study

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### **ABSTRACT**

**Aim:** To find out perception of Physiotherapy students towards institutional based assessment proforma for patients.

**Materials and methods:** A self-structured questionnaire was used which was validated by MET (Medical educational technology) cell of institution. Total 110 Physiotherapy students participated in the study (Final year, Interns and Post-graduate students). The questionnaire was given online to fill by the participants and responses were recorded.

**Result:** The study results suggested that nearly 96% of Physiotherapy students are in favour of institutional-based assessment proforma.

**Conclusion:** Institutional based evaluation proforms should be preferred at students' level in order to follow common guidelines of evaluation in routine clinical practice.

**Keywords:** Institutional based assessment, Patient proforma, perception, Physiotherapy students.

#### INTRODUCTION

Assessment proforma is a standard format accepted and followed separately at institution level in medical fields. Systematic assessment is an essential part of learning as well as teaching, because it collects information that students and teachers can use to evaluate student achievement and to alter or improve the learning teaching and process. Assessment proforma for patient evaluation is clinical tool by which systematic patient approach could be achieved. (2) Perceptions refer, how people understand and assign meaning to the information in environment. (2) Students in medical field forms expectations and perceptions about assessment quality, and they experience the consequences of inferior assessment quality at various stages of professional medical education. (1)(2)(3) These expectations and perceptions influence, how students use

assessment and the information provided in educational practice. (2) The perceptions of the students with regards to the prevailing system of education have facilitated a change in the attitude and the practice of the faculty members in the desired direction. (3) This will help a better conceptualization of the subject, improve performances of students and learners adapting gradually with the institution-based care in the modern medical education in India. (3) Various surveys were used in few studies are, students perceptions of assessment quality questionnaire (SPAQQ) and questionnaire developed using likert scale. (2) Previous studies have also stated that, there have been many calls to reform the way science is taught to focus on student-centred learning. <sup>(4)</sup> Using assessment to generate evidence to improve and enhance teaching, and enable all students to be successful. (5) Decades of studies testing various active learning

techniques have shown that these approaches consistently promote student learning when compared with traditional classroom learning. (6) It is also true that mere dissemination is not sufficient for widespread, long-lasting change. (7) In successful department, probably needs wide transformation effort to go beyond simply providing materials on innovative teaching methods. (8) Clinical education is a major part of medical education which allows the apply their students to theoretical knowledge in practice within a clinical setting. (5)(9) Educational experiences are crucial in the professionalization process, role models and clinical practice, in particular, are important determinants. (6)(8) students' behavioural Increase in engagement could have direct impact on raising student achievement; the more students actively participate in course activities, the more they will learn the **(13)** course content. Efficient learning strategies, supportive curricular design, reflective communication, and positive rolemodelling all play central roles in the (13)(14,15) attainment process. Education programs should be designed to include those aspects of education which promote professionalism field in the Physiotherapy. Since, little is known about students' expectations and perceptions of assessment quality (1) hence present study aims at evaluating student's (final years, Interns, post-graduates) perception towards quality assessment of proforma for patient.

### MATERIALS AND METHODS

**Study Area**: VSPM's college of physiotherapy.

Study Setting: Nagpur.

**Sample Size (n):** Total=110 Physiotherapy students' (final years, Interns, postgraduates).

Study protocol was prepared. Permission was taken from the principal of VSPM's college of Physiotherapy. Permission was taken from institutional ethical committee. Physiotherapy final year, interns and post graduate students deal with patient

assessment; management and treatment on regular clinical practice hence only those selected according were inclusion criteria. Total strength of the students from all the three classes was 110. self-Therefore n=110. A questionnaire was prepared and it was the validated from **MET** (Medical educational technology) cell of NKP salve institute of medical sciences, Nagpur. Out of 110, five students participated in pilot study and responses were obtained from them. A questionnaire was prepared using Google forms. A self structured questionnaire, included 14 questions and response was recorded on five point likert scale (strongly agree, Agree, Neutral, Disagree and Strongly disagree) evaluating perception of evaluation proforma for patient and it was forwarded to all the participants. Data was recorded and responses were obtained from all the participants. The obtained data was then analysed. Physiotherapy students (i.e. first year, second year and third year) and those who were not willing to participate in study were excluded from the study. Ouestionnaire evaluates perception students for various aspects of evaluation proforma for patient like its need, helpfulness, relevance, importance, filling completely or partially, time constraints, value to time, diagnosis, framing treatment plan, burden on evaluator, positive patient outcome, maintenance of patients' records as well as scope for future research etc.

## **STATISTICAL ANALYSIS:**

**Descriptive statistics**: Data was coded and analysed in statistical software STATA version 10.1 (2011). Descriptive statistics like mean and standard deviation were calculated to summarise quantitative variables (i.e. Age). Qualitative variables (i.e. Gender, perceptions) were summarised by frequency and percentage.

**Inferential statistics**: Positive perceptions of students, overall and by category was expressed in percentage along with 95% confidence interval. Difference in

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proportions in all three categories was tested by chi square test. p value  $\leq 0.05$  was considered statistically significant.

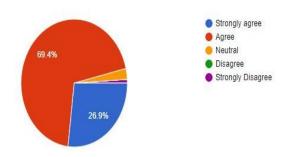
### **RESULTS**

Present educational qualification of the students who participated in study was final year students (44.4%), Interns (26.9%) and Post-graduate students (28.7%).

## Q.1. There is a need of institutional-based assessment proforma for patient evaluation.

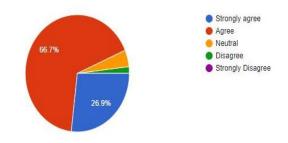
Total 96.3% of participants agree that there is a need of institutional based assessment proforma for patient evaluation out of which 26.9% of participants strongly agree and 69.4% of the participants agree to it.

This suggested that there is a need of institutional-based assessment proforma for patient evaluation.



## Q.2. Assessment proforma help me in a systematic evaluation of the patient.

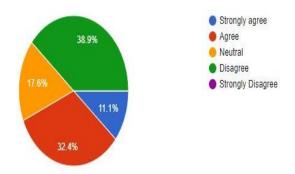
Total 93.6% of the participants agree that assessment proforma helps them in a systematic patient evaluation out of which 26.9% strongly agree and 66.7% of participants agree to this. Whereas, 6.4% of the population disagrees with this. Therefore, it can be stated that assessment proforma help students in a systematic patient evaluation which is mandatory and students find assessment proforma to be helpful to them in this regard.



## Q.3.All the components of assessment proforma are relevant to be filled.

Total 43.5% of the students agree that all the components of assessment proforma are relevant to be filled out of which 11.1% of the students strongly agree and 32.4% of them agree with this. Whereas, 38.9% of the students disagree with this and 17.6% has neutral response.

It can be interpreted that majority of students perceive, there is need to assess each and every component of evaluation proforma individually and sequentially to come to an appropriate diagnosis. Whereas, 39.3% students also perceive that assessment of all the components is not necessary to come to a diagnosis.

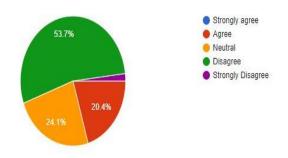


# Q.4. Physiotherapeutic assessment can be carried out without an institutional-based assessment proforma.

Total 53.7% of the students disagree that physiotherapeutic assessment can be carried out without an institutional-based assessment proforma. Whereas, 20.4% of the participants agree to this and 24.1% have a neutral response.

So, it can be stated that students' feel institutional-based assessment proforma is useful for patient assessment.

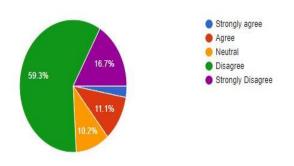
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# Q.5. Complete evaluation of the patient is not mandatory and few components can be overlooked.

Total 76% of the population disagree with the fact that complete evaluation of the patient is not mandatory and few components can be overlooked among which 16.7% of the population strongly disagree and 59.3% of the population disagree to it. Among 11.1% of the population agrees to the statement while 10.2% of them have a neutral response to this.

Nearly 2/3<sup>rd</sup> population i.e. 76% agree that complete patient evaluation is mandatory and the components of evaluation cannot be overlooked. Whereas, 11.1% of the population agree with the fact that all components should not necessarily be assessed for a given case.

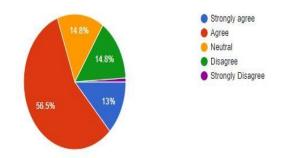


## Q. 6. Completion of assessment proforma is a time taking process.

Over all 69.5% of the students agree that completion of assessment proforma is a time taking process out of which 13% of the students strongly agree to this and 56.5% of the students agree. 14.8% have a neutral response towards it and the remaining 14.8% disagree with this.

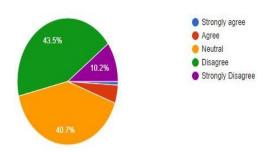
Here we get to know that 69.5% of the students feel assessment proforma is a time

taking process because of the series of evaluation tests associated with the patient assessment and management and 14.8% believe that if meticulously approached, it does not consume extra time.



# Q.7. The systematic approach of the assessment proforma does not add value to the time I have spent on the assessment.

Total 53.7% of the students disagree that systematic approach of the assessment proforma does not add value to the time spent on the assessment out of which 10.2% strongly disagree and 43.5% disagree to this. Among 5.6% of the students agree and 40.7% have neutral response towards this. The majority of the students believe that systematic approach of the assessment proforma does add value to the time spent on assessment process.

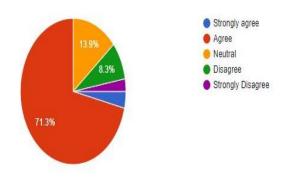


# Q.8. Inadequately completing the assessment proforma make me miss out an appropriate diagnosis.

Total 75.6% of the students agree that inadequately completing the assessment proforma may make them miss out an appropriate diagnosis out of which 4% of the population strongly agree and 71.3% of the population agree to this. While 8.3%

disagree and 13.9% have a neutral response towards this.

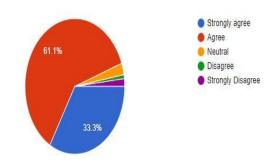
Majority of the participating population (75.6%) feel that inadequately completing the assessment proforma may make them miss out an appropriate diagnosis which makes it clear that students feel confident towards patient assessment and diagnosis while using assessment proforma for an evaluation. Nearly 8.3% disagree with this because all components are not necessary to be evaluated while assessing a patient.



# Q.9.Clinical findings observed in assessment proforma help me in framing a better treatment plan.

Total 94.4% of the participating population feel that clinical findings observed in assessment proforma help them in framing a better treatment plan out of which 33.3% of them strongly agree and 61.1% of them agree to this. Whereas, 2.8% disagree to this while 3% have a neutral response.

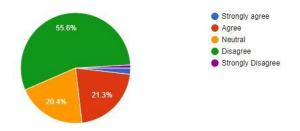
Almost all the students (i.e., 94.4%) agree that clinical findings they get while evaluating a patient using assessment proforma help them to frame a better treatment plan for the patient, thereby increasing their productivity of the treatment and hence the patient outcome. 2.8% of the students disagree to this because physiotherapeutic assessment could also be carried out without using the assessment proforma.



# Q. 10.Repetitive follow up of patient according to the assessment proforma increases the burden on me as an evaluator.

Among all, 58.6% of the population disagree that repetitive follow up of patient according to the assessment proforma increases the burden on them as an evaluator out of which 3% of them strongly agree and 55.6% of them agree to this. 24.3% of them agree to this out of which 21.3% agree and 3% of them strongly agree to this. 20.4% have a neutral response towards this.

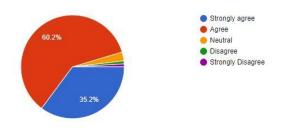
It clearly means that 58.6% of the students feel that there is no burden of the repetitive follow up because assessment proforma is systematically organised to record data of follow-up patients. While 24.3% of the students agree to this because managing OPD hours and recording follow-up of the patients in assessment proforma may increase their burden for work.



# Q. 11.A proper evaluation and hence positive patient outcome give me confidence to improve further.

Total 95.4% of the target population agree that a proper evaluation and hence positive patient outcome give them confidence to improve further out of which 35.2%

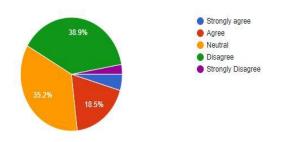
strongly agree and 60.2% agree. 4.6% of the students have a neutral response towards it. It suggests that 95.4% of the students feel confident of their clinical improvement through a proper evaluation and evaluation through assessment proforma serves the same purpose.



# Q. 12.It is easy to complete the assessment proforma and manage OPD hours altogether.

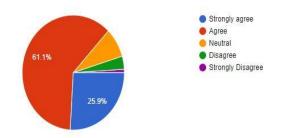
Total 22.5% of the target population feel that it is easy to complete the assessment proforma and manage OPD hours altogether out of which 4% of the students strongly agree and 18.5% agree. Whereas,41.9% of the population disagree to this out of which 3% of them strongly disagree and 38.9% disagree. Among all, 35.2% of the population have a neutral response towards it.

So, 22.5 % of the students feel that it is easy to complete the assessment proforma and manage OPD hours together If both the systematically things are managed. Whereas, 41.9% of the population feel that completion of assessment proforma is a time-taking process and it may become a burden on the evaluator to manage OPD and complete hours the assessment proforma altogether.



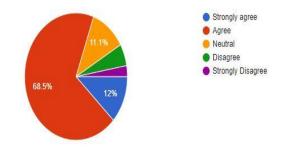
# Q.13. It is a systematic way of maintaining a patient record through assessment proforma

Among all, 87% of the population agree that assessment proforma is a systematic way of maintaining patient record out of which 25.9% strongly agree and 61.1% agree. 4.7% disagree to this and 8.3% of them have a neutral response. This states that 87% of the population feel evaluating a patient using assessment proforma and maintaining the record of the patient is a systematic way of patient approach and it gives them confidence to improve further. 4.7% of them disagree with this strongly because completion of systematic assessment proforma is a time taking process.



## Q.14.Assessment proforma help me for further research studies.

Total 80.5% of the population agree that assessment proforma help them for further studies out of which 12% of them strongly agree and 68.5% agree. 8.4% disagree to this and 11.1% have a neutral response. 80.5% of the population agree that assessment proforma help them for further studies implying research-oriented use of proformas.



### **DISCUSSION**

The aim of this study was to know the perception of the Physiotherapy students (final years, interns, postgraduates) towards institutional-based assessment proforma used for patients. A pilot study was done on 5 students and 105 students were selected from VSPM's college of physiotherapy. After which, online questionnaire was sent to all the students and 100% participants reverted back. None of the questions were half filled. Questionnaire contained 14 subquestions. It consisted of preferred methods of patient evaluation, nature and difficulty level of the assessment proforma.

Many institutes including our institute uses institutional-based proformas to keep patient documentation and use that proforma for various patient outcome.

In this questionnaire-based study were recorded among responses questions which contained both positive and negative perceptions. 8 questions were based on positive perceptions whereas 6 questions based negative were on perceptions. Question no. 1, 2, 3, 8, 9, 11, 13, 14 were based on positive perceptions. Que.1 evaluated the need of institutionalbased proforma in which 96% students reported that there is a need of such evaluation IBP's for various conditions which leads them to definitive diagnosis.

Que. 2 assessed systematic evaluating nature of the assessment proforma and 93.6% of the students' state that proforma helps them in systematic patient evaluation which means that sequential arrangement of proforma helps student to carry out a systematic evaluation procedure for a given patient.

In Que. 3 students were asked about the relevance of components mentioned in the proforma for which 43.5% students agree which means that assessment proforma should contain series of evaluation tests which are specific for a given condition.

Que. 8 evaluates how likely the assessment proforma helps in diagnosis of a given case to which 74.8% students agree

and this response indicates that to attain a particular diagnosis for a given case, students need series of evaluation tests and assessment proforma which guide them for the same.

In Que no. 9 students were asked if clinical findings observed in assessment proforma help them in framing a better treatment plan to which 94.4% of the students agree because the series of evaluation tests are carried out in a sequential manner which helps in getting positive findings.

Que. 11 evaluates the positive patient outcome with respect to assessment proforma to which 95.4% of the students agree that proper evaluation and positive patient outcome give them confidence to improve further both clinically and academically.

In Que. 13, 87% of students agree that proforma is a very systematic and reliable way to maintain patient record that can be reviewed for further progression of the patient. Que. 14 evaluates use of proforma for further research studies to which 80.5% students have a positive response the data recorded in these proformas can be used for further observational/interventional/cross-sectional studies, academic purpose, and to review and analyse patient progress. By these results. positive we conclude that assessment proforma is a need for target population because it helps them in assessment, management and documentation of the case. It leads to errorless diagnosis and avoids missing out on any component. It is helpful in academics and research purposes. It can also be used in referral cases.

Questions 4,5,6,7,10,12 were based on negative perceptions which state that-Que. 4 evaluates the importance of assessment proforma and 55.5% of the target population feel that physiotherapeutic assessment cannot be carried out without an assessment proforma because it contains all the major components of assessment process.

Que. 5 analyses completion of evaluation proforma and 76% of students strongly support the fact that complete evaluation of the patient is mandatory and components cannot be overlooked since the further management of patients will depend upon clinical findings observed from the evaluation tests.

The results of que. 6 and 12 correlate with each other which state that due to busy OPD hours it often becomes difficult to complete assessment proforma in one session hence, it can be completed in following sessions. By the above negative we conclude that completion of assessment proforma in stipulated time is a difficult process because it increases the burden on an evaluator in the hectic OPD hours. It is not always necessary to evaluate all the mentioned components in assessment proforma because they may not be necessary for a specific condition. Que no.10 has been misinterpreted according to the trend of questionnaire.

Que. 10 evaluates positive attitude towards assessment proforma but as per formulation of question no. 10 participants might have misinterpreted the word "follow up" in the given question as it indicates a brief follow up of previous findings and not a complete repetitive evaluation. So, there is a need to modify the formation of que.10. Neutral response to Que. indicates Physiotherapist/ evaluator can spend some time for the assessment as per time permits at the clinic. A study was carried out to develop questionnaire to measure students perceptions and expectations assessment quality and it was found that these perceptions influence how students use assessment and the information it provides in clinical practice. (1) It supports the findings from present study in which 94.4% of the target population feel that clinical findings observed in assessment proforma help them in framing a better treatment plan.

### **CONCLUSION**

Perception of all the factors was precisely recorded in which we got both positive and negative responses. It was found that majority of the responses that were recorded are in the favour of Institutional-based assessment proformas. 96% of the students strongly feel the need of Institutional-based assessment proforma for patient evaluation. At the same time, many of them feel that completion of assessment proforma is a time-taking process but it adds value to the time spent on assessment process. Majority of the student's indicate positive academic and clinical growth with the use of assessment proformas.

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