

Research Article

Utility of check list for neck pain history: student and teacher perceptions

Niyati A. Desai^{1*}, Subhash Khatri²

¹Shrimad Rajchandra College of Physiotherapy, Uka Tarsadia University, Maliba Campus Gopal Vidyanagar, Bardoli-Mahuva Road, Tarsadi, Mahuva 394 350, Surat, Gujarat, India

²College of Physiotherapy, Pravara Institute of Medical Sciences, Loni, Rahata, Ahmednagar, Maharashtra, India

Received: 10 October 2015

Revised: 15 October 2015

Accepted: 16 November 2015

*Correspondence:

Dr. Niyati A Desai,
E-mail: niyati.desa@utu.ac.in

Copyright: © the author(s), publisher and licensee Medip Academy. This is an open-access article distributed under the terms of the Creative Commons Attribution Non-Commercial License, which permits unrestricted non-commercial use, distribution, and reproduction in any medium, provided the original work is properly cited.

ABSTRACT

Background: Teaching and learning of clinical skills for medical and paramedical students believed to be a crucial phase. The primary purpose of this study was to identify the teaching behaviours perceived to be the most effective and those to be the most hindering with the investigator developed check list for neck pain history.

Methods: Forty seven students and eight clinical teachers participated in the present study. Clinical teaching session on neck pain history was carried out by a clinical teacher and performance recorded with the investigator developed check list. Then one student was asked to take a focused history from a neck pain patient followed by scoring. After this, they were provided a copy of check list to read and then they were requested to re-obtain the history. Score difference was noted. Student and teacher perceptions about the utility and limitations of using check list in teaching and learning was taken.

Results: Behaviours perceived as most helpful and hindering by both students and clinical teachers are ranked and listed as per their mean value.

Conclusions: Use of the check list for neck pain history can facilitate a favourable learning and teaching environment.

Keywords: Neck pain, Check list, Clinical teaching

INTRODUCTION

Clinical teaching is expected to be a vital phase for constructing an important and distinct part of healthcare profession. A high quality of clinical education is responsible for providing great learning behaviours which influences their lifetime professional performances, resulting in enhancement of physical therapy services.¹ Effective clinical teaching is essential to incorporate clinical skill, behavior and attitudes into professional practice and welfare of the profession. Developing clinical skill requires integration of both theoretical and practical skill into real life situations.^{2,3} Clinical teaching

is a unique method which encompasses not only a student, a clinical instructor but also a real patient.¹ Theory class and books cannot replace the clinical teaching and its positive and constructive teaching-learning benefits.

Taking a detailed history from a patient requires good interviewing skills and ninety percentage of clinical diagnosis depends on patient's history. A body of obtaining detailed information, accurate diagnosis, improved rapport and greater compliance with treatment is often termed as skilful interviewing skill.⁴ With the introduction of video technology, popularization of the

bedside teaching method, the development of programmed instruction, and investigation of clinical problem solving has given enough emphasis in the direction of clinical examination and interviewing skill.⁵ The qualities that constitute effective clinical teaching in physical therapy are neither well studied nor published. Focused history taking is believed to be an important clinical skill. Hence, the primary purpose of this study was to identify the teaching behaviours perceived to be the most effective and those to be the most hindering with the investigator developed check list for neck pain history.

METHODS

Study design

Test re-test study design was used in the present study where a total forty seven UG physical therapy students and eight clinical teachers from Shrimad Rajchandra College of Physiotherapy, Bardoli, Gujarat had participated. Teaching behaviours perceived to be the most effective and those to be the most hindering with the investigator developed check list were identified for neck pain history.

Tool/instrument

Table 1 shows the check list.

Procedure

After referring available data a check list of 21 questions was prepared for neck pain history. Clinical teacher conducted a session on neck pain history for UG students and scoring was given as per the performance. After the teaching session; focused history taking activity was done from a neck pain patient among the UG students and clinical teacher. The score was given as per the questions he/she has covered and then the student was asked to refer the check list. The same activity was repeated and re-scoring was done, as the student had referred the check list, the score had improved from 11 to 19 out of 21. After the activity, students and clinical teacher's perception about teaching behaviours in terms of utility of check list was identified and classified into most effective and most hindering.

The five-point rating scale of the original instrument was expanded to a seven-point scale to increase the numerical choices for rating behaviours. The ratings were weighted as follows: 1= very helpful, 2= moderately helpful, 3=slightly helpful, 4= neither helpful nor hindering, 5= slightly hindering, 6= moderately hindering, 7= very hindering. Results were analyzed for 1) the entire group of respondents.

A check list for neck pain history with instructions was given to each student and clinical teacher who was actively involved in this study. A cover letter attached to

each check list explained the general purpose of the study. Each participant was instructed to give their feedback in terms of most effective and hindering behaviour with the use of check list for neck pain history.

Table 1: The check list.

Check	Sr. No	Item	Score
	1	PT introduces himself/herself	
	2	PT explains the purpose of interaction	
	3	PT enquires the patient's name	
	4	PT enquires the patient's age	
	5	PT enquires the patient's occupation	
	6	PT enquires the complaints of the patient	
	7	PT looks for any neurological presentation	
	8	PT enquires the previous history of neck pain	
	9	PT asks duration of neck pain	
	10	PT takes pain assessment(PQRST)	
	11	PT asks any history of trauma/fall/surgery	
	12	PT enquires about the quality, area, radiation of pain	
	13	PT enquires about mental, social and economical status of the patient	
	14	PT asks about any difficulty in writing, holding, gripping etc	
	15	PT asks about weakness in hands	
	16	PT asks about the complain of heaviness/tingling in hands	
	17	PT asks about the fatigue level of the patient	
	18	PT asks about the limitation of activities	
	19	PT asks about the movement limitation	
	20	PT inquires about sleeping pattern	
	21	PT informs that history taking is over	
			Total Score=

Forty seven students and eight clinical teachers returned completed feedback forms with most effective and

hindering teaching behaviours. The characteristics of the subjects are shown in Table 2. The perceived most helpful and most hindering teaching behaviours were identified by ranking mean ratings.

Table 2: Description of subjects (N= 55).

Variables	Total
Number of student respondents	47
Male students	12
Female students	35
Number of clinical teacher respondents	08
Male teacher	02
Female teachers	06
Total	55

RESULTS

Ten behaviours perceived as most helpful by both students and clinical teachers are rank-ordered and listed in Table 3. The most highly rated helpful behaviour pertain to the teaching process are 'answers question clearly', 'creates interest in students', 'easy & effective teaching method. Student oriented helpful behaviours are 'easy accessible', 'creates confidence in students' and 'memory aid'. It has been believed that active and regular utilization of check list for patient history will assist to draw to proper diagnosis.

Table 3: Teaching behaviors identified as most helpful.

Rank	X	s	Behaviour
1	1.33	.55	Answers questions clearly
2	1.37	.62	Easily accessible to students
3	1.38	.64	Creates confidence in students in history taking
4	1.40	.66	Instrument for detailed history
5	1.41	.69	Works as a memory aid
6	1.47	.69	Helps to draw a proper diagnosis
7	1.48	.71	Demonstrates a genuine interest in students
8	1.51	.69	Easy and effective way for teaching
9	1.55	.69	Summarizes major points required for neck pain history
10	1.57	.72	Active and regular utilization is possible in clinical practice

The perceived most hindering behaviour – 'Patient losses confidence on therapist'- had a mean rating of 5.05. The other four behaviours perceived as most hindering were rated between 4.92 & 4.69.

Table 4: Teaching behaviors identified as most hindering.

Rank	X	s	Behaviour
1	5.05	1.36	Patient losses confidence on therapist
2	4.92	1.61	Prevents problem solving approaches and gives direct solutions
3	4.81	1.75	Appears to discourage student-teacher relation by decreasing the discussion time
4	4.69	1.33	Increases dependency of students

DISCUSSION

The primary purpose of this study was to identify the teaching behaviours perceived to be the most effective and those perceived to be the most hindering by students and clinical instructors for the utility of check list for neck pain history. In results we authors found that most helpful behaviours with the use of a well formulated check list will provide a favorable learning tool for the neck pain history. Our results are consistent with the previous study on check list for back pain history which was limited to advantages and disadvantages of its utility.⁶ Robert W Jarski et al¹ concluded in the study that instructional methods known to be most effective clinical teaching and assist to enhance the future physical therapy services.

Many physical therapists inpatient as well as outpatient settings are involved in the clinical phase of student education. Effective clinical teaching in these settings is believed to require a unique subset of teaching skills.⁷⁻¹¹ Previously, the use of the videotape has been evaluated in the clinical teaching by Henry N. Wagner in his study on 'Videotape in the teaching medical history taking'.¹²

Most helpful behaviour

In the present study we found ten most helpful behaviors which support our hypothesis. These behaviors come under main three domains: communication skills, professional skills and interpersonal skills. Use of the check list in clinical teaching involves interpersonal behaviors such as friendliness towards students, enthusiasm for teaching and sensitivity towards patient needs. This tool provides intensive material and guidelines for interviewing and evaluating the clinical skill as well as practice opportunity with active participation in patient care. The present study proving the check list for patient history is considered as a useful tool which can be utilized in clinical teaching and clinical set up as well.

Most hindering behavior

In the present study two hindering teaching behaviors perceived are 'prevention of problem solving approach' and 'decreased discussion time'. Other hindering behaviors are 'patient losses confidence on therapist and 'increases dependency of students'. Videotaped interactions or any other tool should be test to compare its efficacy with investigator developed check list for patient history.

CONCLUSION

From the data, we conclude that use of check list for neck pain history can facilitate a favourable learning and teaching environment. The check list may help clinical teachers to 1) assess their own clinical teaching skill and 2) application of check list in clinical practice. This model provides intensive material and guidelines for interviewing and evaluating the clinical skill.

Funding: No funding sources

Conflict of interest: None declared

Ethical approval: The study was approved by the Institutional Ethics Committee

REFERENCES

1. Clinical teaching in physical therapy: student and teacher perceptions. Robert W Jarski. Physical therapy vol 70, number 3, march 1990.
2. DeCecco JP, Crawford WR. The Psychology of Learning and Instruction. Englewood Cliffs, NJ, Prentice-Hall Inc, 1974.
3. Knowles MS. Andragogy in Action: Applying Modern Principles of Adult Learning. San Francisco, CA, Jossey-Bass Inc, Publishers, 1985.
4. Medical Teacher, Henry Brodaty.
5. Nardone DA, Reuler JB, Girard DE. Teaching History-Taking: Where Are We? The Yale Journal Of Biology And Medicine. 1980;53:233-50.
6. Desai N, Khatri SM. Utility of Check List for Low back pain History. IJPOT. 2013;7(2):118-20.
7. Emery MJ. Effectiveness of the clinical instructor: Students' perspective. Phys Ther. 1984;64:1079-83.
8. Scully RM, Shepard KF. Clinical teaching in physical therapy education: An ethnographic study. Phys Ther. 1983;63:349-58.
9. Gjerde CL, Coble RJ. Resident and faculty perceptions of effective clinical teaching in family practice. J Fam Pract. 1982;14:323-7.
10. Irby DM. Clinical teacher effectiveness in medicine. J Med Educ. 1978;53:80;815.
11. Stritter IT, Hain JD, Grimes DA. Clinical teaching reexamined. J Med Educ. 1975;50:87& 882.
12. Henry N. Wagner. Videotape in the teaching medical history taking. Journal of Medical Education. 1967; vol 42:1055-8.

Cite this article as: Desai NA, Khatri S. Utility of check list for neck pain history: student and teacher perceptions. Int J Community Med Public Health 2016;3:149-52.