Relationship between Physical Therapy Examination Skills and Clinical Reasoning of Novice Physiotherapists.

Kanae Takahashi 1)5) , Shunya Hatakeyama 2), Tatsuhiro Yoshida 3), Hirofumi Hori4), Mitsunori Matsushita5),

1) Higashi Osaka Hospital,2)Hyogo Prefectural Amagasaki General Medical Center

3) Kishiwada Tokushukai Hospital,4) Konan Women's University ,5) Kansai University

ABSTRACT

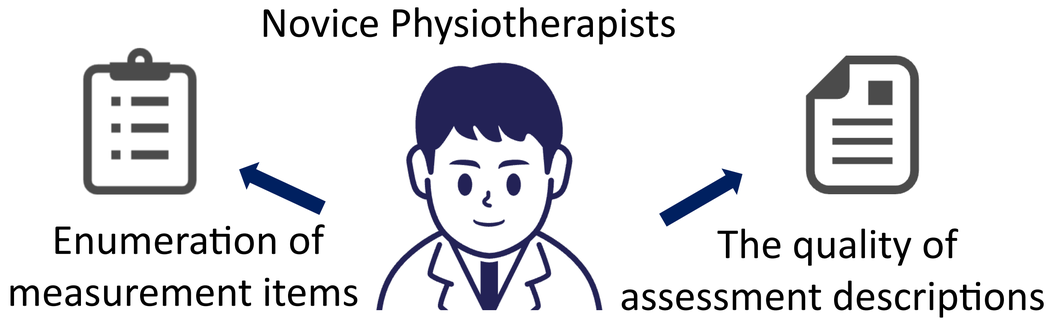
In Japan, an imbalance between supervisors and novice physiotherapists may affect the development of clinical reasoning skills. This study examined the clinical reasoning abilities of 15 novice physiotherapists (1-5 years of experience) using simulated stroke cases. Participants listed necessary physiotherapy measurements and wrote assessment descriptions. Results showed a moderate positive correlation between selecting relevant measurement items and higher clinical reasoning quality. In conclusion, the ability to choose appropriate measurements is key to stronger clinical reasoning, while those who struggle may have difficulty connecting results logically.

INTRODUCTION

In Japan, the rapid increase of physiotherapists has upset the balance of supervisor-novice ratios.

There is concern that Novice Physiotherapists may lead to a decline in clinical reasoning skills.

Purpose : **To obtain insights about efficient methods to achieve clinical competence.**



Novices' clinical reasoning skills
by assessing, comparing, and considering
the breadth of knowledge
through the enumeration of measurement items and the quality of assessment descriptions.

METHODS

Participants 15 physiotherapists with 1 to 5 years of experience

Simulated cases specifying diagnosis (stroke) and age.

Test (1) List physiotherapy measurements that may be necessary for Simulated case.

Each measurement item was then assigned a score based on its importance, which was determined across multiple textbooks.

Test (2) Write a quality of the assessment description of the simulated case.

the quality of the assessment description was scored based on the clinical reasoning rubric.

Statistical analysis

Statistical analysis was performed on the data in Test results (1) and Test results (2).

RESULTS

Correlation tests between
(1) measurement items listing scores and
(2) clinical reasoning assessment scores
revealed a moderate positive correlation (r=0.54).

The result suggests that…

✔ Physiotherapists who list relevant measurement items for the simulated case can construct an appropriate assessment.

✔ A qualitative examination of the measurement items showed that the more specific the physiotherapy test, the higher the clinical reasoning ability.

DISCUSSION

■ Participants who could specifically list the measurements were observed to have better clinical reasoning skills.

For example: instead of stating **"motor paralysis test,"** you can list a detailed test name, such as **"Fugl-Meyer Assessment."**

■ Individuals with low assessment ability may have difficulty connecting measurement results logically and may be unable to formulate appropriate clinical inferences.

CONCLUSIONS

The ability to select appropriate measurement items correlates to higher quality clinical reasoning.

mail:k637425@kansai-u.ac.jp