

한국 물리치료사의 임상기록에 대한 조사연구

한려대학교 물리치료학과
김 승 준

A Survey of Physical Therapy Clinical Progress Note in Korea

Kim, Seung-joon, P.T., M.Sc.
Dept. of Physical Therapy, Hanlyo University

〈국문요약〉

환자에 대한 기록은 일정한 형식을 가지고 환자 내원 초기부터 환자 및 의료진의 요구와 관리목적에 부합한 효과적인 평가, 치료계획, 치료적 중재를 수립할 수 있게 만드는 필수적인 일련의 상호관련학적 의사소통 도구임과 동시에 치료사가 환자관리에 포함된 사고 과정을 분석하는 데 도움을 주며 문제해결에 대한 사고를 체계화하는데 있어 중요한 역할을 한다. 본 연구의 목적은 물리치료사의 일반적 특성과 임상기록의 실태, 임상기록의 중요성을 인식하고 임상활동의 문제점을 개선하며 기록의 체계화를 이루어 임상기록의 활성화와 나아가 물리치료의 질적 향상과 물리치료 서비스에 대한 효율성을 높이는데 있다. 이 연구는 전국 의료기관이나 보건관련기관에서 근무하는 물리치료사를 선정하였다. 2005년 7월1일부터 8월30일 사이에 구조화된 설문지 320매를 직접 전달해 치료사가 작성한 설문지 314매를 직접 수거하였다. 분석 방법으로는 백분율과 빈도, Kuskal-Wallis Test, Pearson Chi-Square, Mann-Whitney U로 검정하였다. 잘못된 응답자 1명을 제외한 응답자 총 313명 중 남자 142명(45.2%), 여자 171명(54.5%) 이었으며, 25세 이상 29세 이하 연령층이 119명(37.9%)으로 가장 많이 분포하였다. 근무처에 따른 근무 개월, 일일 평균 환자수는 통계학적 검정으로 유의한 차이가 있는 것으로 나타났다($p<.05$). 근무처에 따른 임상기록 작성에서도 통계학적 검정이 유의하였다($p<.05$). 임상기록 작성이 효율적인 치료, 치료사 만족도에도 통계학적으로 유의한 결과가 나타났다($p<.05$).

핵심 단어: 사고 과정, 임상기록, 치료사 만족도.

*교신저자: 전남 광양시 덕례리 199-4 한려대학교 물리치료학과 e-mail : seungjoongo@hanmail.net

I . Introduction

The clinical progress note serves an important role regarding the care process, but few studies have suggested whether thoroughness of documentation is associated with working conditions and the reasons of undocumented clinical progress note. Clinical progress note of patient care has been given more emphasis for the past a few years in Korean physical therapy. Hammond(1999) stated that computerized problem-oriented medical record system plays an increasingly important role in the dissemination and management of clinical, administrative, and financial data in a high competitive, cost-contained, managed-care environment. The physical therapist is the coordinator of physical therapy care and services and must continually communicate verbally and through written documentation with all individuals involved in the care of a patient(Kisner and Colby, 2002). Documentation has many purposes, from assuring quality care to communication to discharge planning. It has become very important in a health care atmosphere that includes lawsuit and the withholding of payment by third party payers (Kettenbach, 2004). The problem-oriented medical record (POMR) structure was introduced by Lawrence Weed 30 years ago(Ho, et al 1999). Many facilities never use the POMR; rather, they use some other type of medical record format. Other facilities use a somewhat adapted POMR format. A SOAP(Subject Objective, Assessment, Plan) note is a method of communicating with the patient's physician and other health professionals, including other therapists and assistants. A SOAP note is a narrative format in which physicians document their interaction and analysis of a patient's condition in a permanent patient record(Heun, 1998). The note communicates the results of the patient interview, objective measurements done, and the therapist's

assessment of the patient's condition, effective written communication is essential in the delivery of physical therapy services. Permanent records must be established to provide a baseline for future reference. The note must be clear, concise, and accurate. Documentation is required by certain regulations and all insurance carries. The right of the therapist and patient is protected should any question occur in the future regarding the care provided to the patients. Clinical progress notes are considered legal documents, as are all parts of the medical record(Bae, 1998; Kettenbach, 2004; Pagliarulo 1996). Patient Management model is an excellent method of structuring thinking for problem solving and used for quality assurance purposes can be used in research(Hall and Brody 1999). The purpose of this study was to determine the present working conditions and writing clinical progress note of Korean physical therapy. To increase quality of treatment, decrease the number of patients per daily treatment by a physical therapist. Then physical therapist write the clinical progress note their procedure to the patients.

II . Methods

1. Subjects

A survey was conducted through structured questionnaire for the physical therapists working in Korea and data from 314 therapists were utilized in the final analysis. The subject was carried out during the period of July 1, 2005 to August 31, 2005 among therapists in Korea. Survey items included general characteristics of their working place, work conditions, clinical progress note related factors and the reasons for not writing clinical progress notes.

2. Measurement and statics

Continuous variables were presented as means \pm standard deviations and categorical variables were presented as a proportion. The differences between sexes were compared using Mann-Whitney U test and Kruskal-Wallis test for continuous data and the chi-square test for categorical data. All analyses were performed using SPSS software version 11.0 (SPSS, Chicago, IL, USA).

III . Results

1. General characteristics of subject

Table 1. General characteristics of subjects

	Type	case(%)
Sex	male	142(45.2)
	female	171(54.5)
	no question	1 (.3)
	total	314(100.0)
Age	20~24	29(9.2)
	25~29	119(37.9)
	30~34	88(28.0)
	35~39	40(12.7)
	40~44	27(8.6)
	45~49	9(2.9)
	50~54	0(.0)
	55~59	1(3)
	no question	1(.3)
total	314(100.0)	
Education	college	191(60.8)
	university	103(32.8)
	graduate school	18(5.7)
	no question	2(.6)
	total	312(99.4)
Marital state	married	144(45.9)
	unmarried	168(53.5)
	others	1(.3)
	no question	1(.3)
	total	314(100.0)

Distribution of the working place showed 192(61.1%) majority in private clinics; on the contrary showing 20(6.4%) minority in university hospitals. The comparative analysis of working

As for the general characteristics of the surveyed physical therapists, male 142(45.2%) exceeded female 171(54.5%) and majority was 25-29 yrs 119(37.9%) in age. Marital state is more unmarried 168(53.5%) than married 144(45.9%). The location of physical therapists working place is the highest in Jeolla-Do 136(43.3%). There was no one their working from GangWon-Do 0(.0%). More than half of them worked in various kinds of hospitals, distribution of working place showed 192(61.1%) in private clinics, 46(14.6%) in hospitals and 20(6.4%) in university hospitals.

place and working period, per daily patients treated and writing clinical progress note were significant($p<.05$).

Table 2. Location of working place and working place

	distinction	case(percent)
Location of working place	Seoul	36(11.5)
	GyeongGi-Do	26(8.3)
	GhungCheong-Do	20(6.4)
	GyeongSang-Do	92(29.3)
	Jeolla-Do	136(43.3)
	GangWon-Do	0(.0)
	Others	2(.6)
	No question	2(.6)
	Total	314(100.0)
Working place	University hospitals	20(6.4)
	General hospitals	44(14.0)
	Hospitals	46(14.6)
	Private clinics	192(61.1)
	Others(rehabilitation centers etc)	12(3.8)
Total	314(100.0)	

Table 3. Working place and working conditions

	University hospitals	General hospitals	Hospitals	Private clinics	Others(rehabilitation centers etc)	p-value*
Working experience	82.8±76.1	83.5±73.7	62.1±62.1	67.0±56.4	98.3±81.6	.290
Working period	62.8±71.4	56.5±67.6	33.8±33.9	26.6±29.1	60.8±65.4	.000
Per daily treatment patients	18.3±8.1	23.7±11.4	31.6±11.3	34.0±13.3	20.4±8.2	.000
Writing clinical progress note(%)	70.0	41.9	37.0	22.9	16.7	.000

Data are given as mean standard deviation or percentage

* P value, determined by Kruskal-Wallis test or chi-square test as appropriate

The comparative analysis of therapeutic utility and documented, undocumented were significant. Their was no significant association between quality improvement and documented, undocumented($p>.05$). The comparative analysis per daily patients treated revealed that there was a significant difference between documented,

undocumented($p<.05$).The comparative job satisfaction and documentation among different characteristics of the respondents revealed that there was significant difference between documented, undocumented.

Table 4. Clinical progress note and related factors

	Documented	Undocumented	P-value*
Therapeutic utility	1.63±.70	1.93±0.82	.002
Quality improvement	1.72±0.80	1.91±0.87	.074
Per daily treatment patients	26.6±12.6	32.5±13.3	.000
Job satisfaction	2.68±1.02	2.97±0.86	.008

Data are given as mean standard deviation.

* P value, determined by Mann-Whitney U test or chi-square test as appropriate

Table 5. The reasons of undocumented clinical progress note

Lack of time	Forgot of documenting methods	Unimportance of clinical progress note	Annoying of documenting	non education of documenting methods	total
126(63.0)	3(1.5)	19(9.5)	29(14.5)	23(11.5)	200(100.0)

The reasons of undocumented clinical progress note is lack of time 126(63.0%), forgot writing methods, unimportance of clinical progress note, annoying of writing, non education of writing methods.

IV. Discussion

Clinical progress note of patient care has more emphasis during the past few years in Korean physical therapy. The purpose of this study was to determine the present working conditions and documenting clinical progress notes of Korean physical therapy. And physical therapist document the clinical progress note their procedure to the patients. The subject was carried out during the period July 1, 2005 to August 31, 2005 among therapist in Korea. Survey items included general characteristics their working place, conditions, clinical progress note related factors and the reasons of undocumented clinical progress note. Kim(1990) reported that the subject were 190 therapists attending the 1989 continuing education sessions who completed the

questionnaire and the subject under investigation were the writing of physical therapy treatment records, length of clinical experience, place of employment, and reasons for not keeping treatment records. Ahn(2002) stated that in regard to the working conditions of the respondents, 34.3% of them treated 15 patients or less per day whereas 25.1% treated 31 patients or more. Also, 52% recorded physical therapy charts periodically. I examined that treated 30.69 patients of per daily patients treated, 30.4% recorded physical therapy charts. In job satisfaction, 44.5% of physical therapists who work in general hospitals are generally satisfied and 25% are unsatisfied(Rha et al, 1998). Uh and Yi suggested there was no significant association between job satisfaction and age, sex, or work place but the job status, and average monthly salary were significant. Kim(2001) provided that the job satisfaction scores of physical therapists showed the highest of the pride of patient treatment and total mean score was 2.96. Park et al(1989) stated that more than half of them worked in various kinds of hospitals, with the remaining in health centers or social welfare

institutions and 46.7% therapists working in private clinics as the largest group, followed by 23.5% therapists working in university hospitals and 19.5% in general hospitals. Distribution of the working place showed 192(61.1%) majority in private clinics on the contrary showed 20(6.4%) minority in university hospitals. The comparative analysis of working place and working period and per daily treatment patients were significant ($p < .05$). The comparative analysis of therapeutic utility and documented, undocumented were significant. There was no significant association between quality improvement and writing, documented, undocumented ($p > .05$). The comparative analysis per daily patients treated revealed that there was significant difference between documented, undocumented ($p < .05$). The comparative job satisfaction and documentation among different characteristics of the respondents revealed that there was significant difference between documented, undocumented. The most frequent reason cited for not recording patient treatment was lack of knowledge of recording methods as well as thinking records are not important—by 93(63.2%) out of 143 respondents (Kim, 1990). The reasons of undocumented clinical progress note is lack of time 126(63.0%), forgot of writing methods, unimportance of clinical progress note, annoying of writing, non education of writing methods. Koo(1986) provides that the patient is the focus for the existence of the profession of physical therapy and he expects and deserves optimum care. Developing standards for recording patient-care data is the first important step in defining quality care in physical therapy. Providing that the record of care corresponds exactly to the care given the record is an important tool in assessing quality of care. Kim, et al(1994) also recommended the physical therapy evaluation is the foundation for the measurement of the outcome of our therapeutic intervention. And we must measure these outcomes. Achieving a high

quality of physical therapy practice requires us to evaluate the client, selecting and administering a variety of tests and measurement.

V. Conclusion

To manage the client and individual patient's case, the physical therapist writes the clinical progress note. Many facilities use some other type of clinical progress note type format. It provides as a legal document, the patient interview, objective measurements done, and the therapist's assessment of the patient's condition. Also the plan for treatment, How to influence third party payers, structuring thinking for problem solving, use for quality assurance purposes, and use in research. So, the clinical progress note helps the therapist organize and plan quality patient care. For increase quality of treatment, decrease the number of patient per daily treatment by a physical therapist. And the physical therapist writes in the clinical progress note their procedure to the patients. We need Korean physical therapy association to provide a model of clinical progress notes of physical therapy. A survey was conducted through a structured questionnaire for the physical therapists working in Korea, and data from 314 therapists. The subject was carried out during the period July 1, 2005 to August 31, 2005.

Major results were as follows;

1. As for the general characteristics of the surveyed physical therapists, male 142(45.2%), female 171(54.5%) and majority was 25-29 yrs 119(37.9%) in age. Marital state is more unmarried 168(53.5%) than married 144(45.9%). The location of physical therapists working place is the highest in Jeolla-Do 136(43.3%). Distribution of working place showed 192 (61.1%) in private clinics, 46(14.6%) in hospitals and 20(6.4%) in university hospitals.

2. There was no significant association between working place and working experience but working place and working period, per daily patients treated and documented clinical progress note were significant($p < .05$).

3. The comparative analysis of therapeutic utility and documented, undocumented were significant. There was no significant association between quality improvement and documented, undocumented($p > .05$). The comparative analysis per daily patients treated revealed that there was significant difference between documented, undocumented($p < .05$). The comparative job satisfaction and documentation revealed that there was significant difference between documented, undocumented.

4. The reasons of undocumented clinical progress note is lack of time 126(63.0%), forgot of writing methods 3(1.5%), unimportance of clinical progress note 19(9.5%), annoying of writing 29(14.5%), non education of writing methods 23(11.5). Lack of writing time showed 192(61.1%) majority in the reasons of undocumented clinical progress notes. And we need to specialize of curriculum for physical therapy education because of non education of writing methods 23(11.5).

Reference

- An So-Youn, Kim Won-Joong, Huh, Young-Bae. Working Conditions, Job Satisfaction and Organizational Commitment of Physical Therapists, *The Journal of Korean Society of Physical Therapy*. 2002;14(4):253-264.
- Ba Sung-Soo, Kim Chung-Sun. Strategy for clinical Progress note. *The Journal of Korean Society of Physical Therapy*. 1998;10(2):133-148.
- Kim In-Sook. research on record keeping by physical therapists in 6 branches of the Korean physical therapists' association(KPTA) in Seoul. *The Journal of Korean Society of Physical Therapist*. 1990;11(1):17-22.
- Kim Myung-Hoon. A study on the job satisfaction and turnover intention of physical therapist. *The Journal of Korean Society of Physical Therapist*. 2001;8(1):107-114.
- Kim Yong-Chun, Oh Kyung-Hwang, Hwang Seong-Soo, et al. Trend of physical therapy research and future study. *The Journal of Korean Society of Physical Therapist*. 1994;1(2):251-263.
- Koo Hee-Seo. A study of problem solving medical record. *The Journal of Korean Society of Physical Therapist*. 1986;7(2):581-592.
- Park Ji-Whan, Chung Nack-Su, Song Young-Hwa. Analysis of the present status on Korean physical therapists and its plan. *The Journal of Korean Society of Physical Therapist*. 1989;10(2):1089-1100.
- Rha Ki-Yong, Oh Young-Taek, Moon Hyang-Mi, et al. A survey on working present status of physical therapists in Korea. *The Journal of Korean Society of Physical Therapy*. 1998;10(1):229-239.
- Uh Kyoung-Hong, Yi Chung-Hwi. Job satisfaction and job understanding of physical therapists in Korea. *The Journal of Korean Society of Physical Therapist*. 1986;7(2):567-579.
- Hall CM, Brody LT, *Therapeutic Exercise: moving toward function*. Lippincott Williams & Wilkins. 1999:1-19.
- Hammond W, Hales JW, Lobach DF, et al. Integration of a computer-based patient record system into the primary care setting. *comput nurs*. 1999;15(2):61-68.
- Heun L, Brandau DT, Chi X, et al. Validation of computer-mediated open-ended standardized patient assessments. *Inte JI Med Inform*. 1998;50:235-241.
- Ho LM, McGhee SM, Hedley AJ, et al. The application of a computerized problem-oriented medical record system and its impact on

- patient care. *Int J Med Inform.* 1999;55:47-59.
- Kettenbach G. *Writing SOAP Notes: with patients/client management formats*, 3rd ed. Philadelphia, PA, F.A. Davis Co., 2004.
- Kisner C, Colby LA. *Therapeutic Exercise: Foundations and technique*. 4rd ed, Philadelphia, PA, F.A. Davis Co., 2002:21.
- Pagiarulo MA. *Introduction to Physical Therapy*. St Louis, Mosby, 1996:34.
- Solomon DH, Schaffer JL, Katz JN, et al. Can the history and physical examination be used as markers of quality? An analysis of the initial visit note in musculoskeletal care. *Medical Care.* 2000;38(4):383-391.