

## 국내 병원의 재활의학과에서 시행하는 결과 측정에 관한 조사

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### The Survey of Outcome Measures in Department of Rehabilitation Medicine in Hospitals of Korea

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**Objective:** The objective of present study was to identify the rehabilitation outcome measures currently used in Korea.

**Method:** The survey was conducted by e-mail questionnaire to 165 department of rehabilitation medicine in hospitals of Korea. Non-responders were sent a second copy of the questionnaire if they did not answer within 1 week. Data from the returned questionnaires were entered into a Microsoft Excel and subjected to descriptive and simple quantitative analysis.

**Results:** A total of 99 (60%) responses were received. Of these, 95% units collected some outcome assessment measure as part of routine clinical practice. Korean version of Modified Barthel Index (K-MBI) (80%) was the most popular global outcome measures. The Korean version of Berg Balance Scale (K-BBS) (53%) was used most frequently for balance assessment. Upper extremity function was checked with hand grip strength test (70%) and Box and block test (67%) most commonly. Korean version of Mini Mental State Examination (K-MMSE) was the most popular cognitive function test (75%). PARADISE Korean version-Western Aphasia Battery (PARADISE K-WAB) was the most popular language test (67%). Sixty-three (67%) units used outcome results for discussion and goal setting. Seventy-eight (78%) units responded that they would use a standardized outcome measures if there is an agreed standardized outcome measures lists (80%) and support of money and time (43%).

**Conclusion:** The survey demonstrated that quite widespread use of outcome assessments in routine clinical rehabilitation within Korea. There is also an agreement for need of common 'basket' of recommended instruments for rehabilitation.

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**Key Words:** department of rehabilitation medicine, Korea, outcome measure, questionnaire

## Introduction

Many outcome measures are currently used in department of rehabilitation medicine in hospitals of Korea. Routine outcome measures are recommended to evaluate

the efficacy of rehabilitation and to compare the therapeutic effects of different programs and practices.<sup>1</sup> The need for measuring rehabilitation outcomes is undisputed, but there have been few reports regarding which outcome measure instruments are most commonly employed in routine clinical rehabilitation practice in Korea.

Generally, patients who need rehabilitation are treated in general hospitals (training hospitals) in acute and subacute phase and transferred to rehabilitation hospitals or care hospitals in subacute and chronic phase in Korea. Rehabilitation is shown to be more effective when rehabilitation teams work together towards an achievement of person-centered goals. And the achievement of goals could be represented by the change of score of outcome mea-

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tures.<sup>2</sup> If outcome measures are different in each hospital, as in Korea, goal achievement could not be analyzed due to different outcome measures in different hospitals. It is helpful to develop a common 'basket' of recommended instruments which may help to guide treatment units which desire to employ formal measures but do not know how to go about it or which to choose. These common 'basket' of recommended instruments could be selected on the basis that (a) there is published evidence for their validity and reliability, and that (b) they are in regular and frequent use in the course of routine practice in Korea.<sup>3,4</sup>

Therefore, this study was performed to evaluate which current outcome measures are most commonly employed in Korea.

## Materials & Methods

This survey was conducted by an e-mail questionnaire (Appendix). The questionnaire included the following items: areas of rehabilitation the centers provide, outcome measures used in each category (dependency, mobility & balance, upper extremity function, cognition, language, perception, mood, quality of life, and pain), what to do with outcome measure results, reasons for not employing outcome measures, degrees of satisfaction with the current outcome measures, and necessary conditions for the common 'basket' of outcome measures. Surveys had 9 questions and if response rate is below 60% out of 9 questions, we exclude the questionnaire. Approval for sending e-mail for survey on outcome measures was granted by the institutional review board of Pusan National University Hospital.

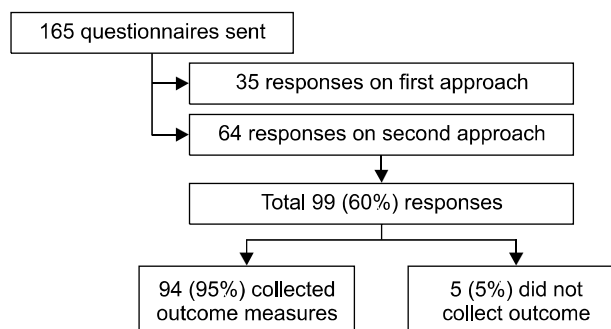
One hundred and sixty-four rehabilitation centers in Korea (75 training hospitals, 20 rehabilitation hospitals and 70 care hospitals) received the questionnaire. These numbers of hospitals represent almost all rehabilitation centers registered in the Korea academy of rehabilitation medicine. After sending the e-mail questionnaire, we made a phone call to notify and inform respondents regarding the e-mail questionnaire. A second copy of the questionnaire was sent to respondents if they did not answer within 1 week. There was no questionnaire which shows response rate of questions below 60%. All respondents were rehabilitation physiatrists working in the hospitals. The data

from the returned questionnaire was entered into a spreadsheet and subjected to descriptive and simple quantitative analyses.

## Results

Of the total 165 questionnaires sent out (75 training hospitals, 20 rehabilitation hospitals and 70 care hospitals), 99 (60%) were returned, of which 35 were returned on the first approach and 64 returned after the reminder. The response rates of training, rehabilitation hospitals, and care hospital were 60%, 60% and 55%, respectively. Fig. 1 shows a flow diagram of the responses. Of these 99 respondents, 94 (95%) collected some outcome measures as part of routine clinical practice and 5 (5%) did not. Although there were sometimes multiple reasons, the reasons for not employing outcome measures were as follows: the lack of evaluators (40%), the lack of time and money (25%), and the lack of consensus among staff on which measures to employ (4%). Of the 94 centers which collected some outcome measures, 88 (94%) provided neurorehabilitation and 82 (88%) offered spinal injury rehabilitation. Eighty-six (92%) provided musculoskeletal and 42 (45%) provided amputee rehabilitation. Seventy-eight centers (83%) undertook rehabilitation of the elderly, 33 (35%) undertook rehabilitation for pediatric patients, 19 (21%) undertook cardiac rehabilitation, and 22 (23%) undertook pulmonary rehabilitation.

A wide range of different measures were in use, of which the most frequently used instruments were grouped by category and popularity (Table 1). K-MBI (80%) was the most popular global outcome measures. K-BBS (53%) was used most frequently for balance assessment. Upper



**Fig. 1.** Flow diagram of the responses.

**Table 1.** Most Frequently Employed Instruments in Each Category and Number of Centers

Category	Most popular instruments	No. of centers using the instrument
Dependency	K-MBI	80%
	FIM	14%
Mobility & balance	K-BBS	53%
	10 meter walk	30%
	SCIM	25%
Upper extremity function	Hand grip strength test	70%
	Jebsen Taylor hand function test	65%
Cognition	K-MMSE	75%
	MMSE-K	69%
Language	PARADISE K-WAB	67%
	K-BNT	35%
Perception	Line-bisection	82%
	MVPT	45%
Depression	K-BDI	55%
	K-GDS	20%
Quality of life	SF-36	14%
	SS-Qol	6%
Pain	VAS	86%
	NRS-11	11%

K-MBI: Korean version of Modified Barthel Index, FIM: Functional Independence Measure, K-BBS: Korean version of Berg Balance Scale, SCIM: Spinal Cord Independence Measure, K-MMSE: Korean version of Mini-Mental State Examination, MMSE-K: Mini-Mental State Examination-Korean version, PARADISE K-WAB: PARADISE Korean version-Western Aphasia Battery, K-BNT: Korean version Boston Naming Test, MVPT: Motor-free Visual Perception Test, K-BDI: Korean version of Beck Depression Inventory, K-GDS: Korean form of Geriatric Depression Scale, SF-36: Medical Outcome Study 36-item Short-Form Health Survey, SS-Qol: Stroke-specific Quality of Life Scale, VAS: Visual Analogue Scale, NRS-11: Numerical Rating Scale-11.

extremity function was checked with hand grip strength test (70%) and Box and block test (67%) most commonly. K-MMSE was the most popular cognitive function test (75%). PARADISE K-WAB was the most popular language test (67%). Depression and pain were measured by Beck Depression Inventory most frequently (55%) and by Visual Analogue Scale (VAS) (86%) most frequently.

Sixty-three (67%) centers have routine discussions about their patients' achievement of goals or future planning based on the results of outcome measure. Sixty-three (67%) respondents reported that they routinely included the results of outcome measures in discharge summaries.

We also evaluated satisfaction degree with each outcome

**Table 2.** Recommended Prerequisites for the Standardization of Outcome Measures

Prerequisites	Percentage
Standardized outcome measure list	80%
Time or money	43%
Background knowledge	41%
Agreement among hospitals	39%

measure. Only a small number of respondents were completely satisfied with their outcome measures (8%); the majority were only neutrally satisfied (55%), leaving another 16% to 12% either moderately satisfied or dissatisfied with their outcome measures.

Finally, we asked "Would you be interested in using the common 'basket' of recommended outcome measures for documenting patients' statuses or progression?" 77 (78%) of the respondents answered that they were interested in using the common 'basket' of recommended outcome measures and that they would use the common 'basket' of recommended outcome measures if the measures were available. The recommended prerequisites for standardized outcome measures are listed in Table 2. Seventy-eight (78%) units responded that they would use a standardized outcome measures if there is an agreed standardized outcome measures lists (80%) and support of money and time (43%).

## Discussion

The questionnaire was widely distributed to obtain information from as many centers as possible. It is noteworthy that as many as 96% of the centers use some sort of outcome measures as part of routine clinical practice and 67% had routine discussions about their patient's achievement of goals. These results suggest that the common 'basket' of recommended outcome measures could be used effectively, if there is an agreement for usage of the common 'basket' of recommended outcome measures.

In our survey, it was clear that K-MBI is the most frequently employed for global outcome measures in Korea. K-MBI is simple, easy to score, but its disadvantage is the pronounced floor and ceiling effect.<sup>5</sup> The reliability and validity of K-MBI was also verified in Korea.<sup>6</sup> Most frequently employed measures for balance is K-BBS.<sup>7</sup> The

K-BBS is a 14-item scale that quantitatively assesses balance and risk for falls in older community-dwelling adults through direct observation of performance.<sup>8</sup> The reasons why K-BBS is most frequently used to assess balance may be that the K-BBS can be easily administered with minimal equipment (chair, stopwatch, ruler and step) and space and that it takes only 10 to 20 minutes to complete the BBS. K-BBS has also a good reliability (0.98).<sup>9</sup>

K-MMSE was the most popular examination tool for cognition assessment. MMSE (Mini Mental State Examination) is a 30-point assessment tool that takes about 8 min to perform with older patients (range from 4 min to 21 min).<sup>10</sup> MMSE correlates well with a number of cognitive screening tests and neuropsychological tests.<sup>11</sup> The K-MMSE has reasonable sensitivity and specificity.<sup>12</sup> The PARADISE K-WAB was the most commonly employed for language function tests. The PARADISE K-WAB has a high reliability (0.99) and validity.<sup>13</sup> Because language quotient (LQ) takes longer time to perform,<sup>13</sup> it is unlikely that every rehabilitation center use LQ in routine clinical practice. We could not investigate whether rehabilitation centers use aphasia quotient (AQ) rather than LQ in routine clinical practice. Additionally, an updated version of PARADISE K-WAB is published now, but in many rehabilitation centers, it is not widely used. It is reasonable to consider alternative such as Korean Test for Differential Diagnosis of Aphasia (KTDDA) or Daegu diagnostic aphasia examination for language function test in common 'basket' of recommended instruments. The validity of KTDDA is verified in Korea.<sup>14</sup>

For perception, depression, and pain evaluation, the most frequently used measures are line bisection test for perception, Korean version of Beck depression inventory (K-BDI) for depression and visual analogue scale (VAS) for pain, all of which take a short time and are easy to perform compared to other methods. Line bisection test, K-BDI, and VAS also have high reliabilities and validities.<sup>15-17</sup> K-BDI was standardized on its reliability in Korea.<sup>18</sup> VAS was also evaluated for its validity and reliability in Korea.<sup>19</sup> Line-bisection test is used frequently for assessing perception but it is not evaluated for its reliability or validity in Korea. Hand grip strength test and Jebson Taylor hand function test are used for assessing hand functions most commonly but they are not evaluated for

their reliability of validity in Korea.

The common 'basket' of recommended outcome measures is needed to make evaluation more effective. Selection of a suitable measure will inevitably depend on the setting, the nature of the service, conditions treated as well as other factors such as availability of staff's time. Recommended instruments should be not only valid, reliable and sensitive to change, but also simple and practical to use in a busy clinical service. One possible indicator of a scale's usefulness is whether it is widely used, since it is unlikely that evaluators will continue to collect data which they do not think clinically useful. As a first step, our survey was undertaken to determine which measures are currently in the most common use in the centers which performed outcome measurement as part of their routine clinical practice in Korea. Our survey presents the most commonly used outcome measures in each category (dependency, mobility & balance, upper extremity function, cognition, language, perception, mood, quality of life, and pain). These baskets of outcome measures could be used as recommended outcome measures in Korea because these instruments are valid, reliable, simple and practical to use as mentioned above. However, some of outcome measures are not currently evaluated for its validity and reliability. These tests need to be evaluated for its validity and reliability to be included in the common 'basket' of recommended outcome measures.

The degree of satisfaction with the current outcome measure system was not so high. The majority of the respondents (55%) were neutrally satisfied, leaving another 16% to 12% either moderately satisfied or dissatisfied with the current system. Seventy-eight percent of all respondents answered that they were interested in employing common 'basket' of recommended outcome measures and that they would use common 'basket' of recommended outcome measures if available. Prerequisites for common 'basket' of recommended outcome measures were standardized outcome measures lists (80%) and support of money and time (43%).

Our survey confirms that many centers employ outcome measures in their routine clinical practice. Although a wide variety of instruments are employed, common themes have emerged which may reasonably form the basis for the proposed common 'basket' of recommended outcome

measures in Korea. In our survey, several limitations need to be mentioned. First, the most popular outcome measures and satisfaction degrees with current outcome measures were not analyzed between training hospitals, rehabilitation hospitals, and care hospitals. The main objective of our survey was to come up with the lists of most frequently used outcome measures which could be employed as a common 'basket' of recommended outcome measures. However, future study is needed to analyze the current system and outcome measure usage between different hospitals in rehabilitation in Korea. Also, some of the outcome measures need to be standardized to be included in the common 'basket' of recommended outcome measures. Lastly, this survey only shows most frequently used outcome measures but does not show outcome measures used in different diseases. Future survey with larger recruitment numbers and more specified outcome measure lists is needed.

## Conclusion

In conclusion, the results of our survey demonstrate that routine outcome assessments have been widely performed in rehabilitation centers throughout Korea and there is also an agreement for need for common 'basket' of recommended outcome measures in rehabilitation.

## References

- 1) Potter K, Fulk GD, Salem Y, Sullivan J. Outcome measures in neurological physical therapy practice: part I. Making sound decisions. *J Neurol Phys Ther.* 2011;35:57-64
- 2) Wade DT. Evidence relating to goal-planning in rehabilitation. *Clin Rehabil.* 1998;12:273-275
- 3) Barak S, Duncan PW. Issues in selecting outcome measures to assess functional recovery after stroke. *NeuroRx.* 2006;3:505-524
- 4) Skinner A, Turner-Stokes L. The use of standardized outcome measures in rehabilitation centers in the UK. *Clin Rehabil.* 2006;20:609-615
- 5) Shah S, Vankay F, Cooper B. Improving the sensitivity of the Barthel Index for stroke rehabilitation. *J Clin Epidemiol.* 1989;42:703-709
- 6) Jung HY, Park BK, Shin HS, Kang YK, Pyun SB, Paik NJ, Kim SH, Han TR. Development of the Korean version of Modified Barthel Index (K-MBI): multi-center study for subjects with stroke. *J Korean Acad Rehab Med.* 2007;31:283-297
- 7) Lee JJ, Lee HJ, Jung HY. The Korean version of Berg balance scale as an index of activity related to ambulation in subjects with stroke. *J Korean Acad Rehab Med.* 2007;31:400-403
- 8) Berg KO, Wood-Dauphine'e SL, Williams JJ, Maki B. Measuring balance in the elderly: validation of an instrument. *Can J Public Health.* 1992;83:7-11
- 9) Jung HY, Park JH, Shim JJ, Kim MJ, Hwang MR, Kim SH. Reliability test of Korean version of Berg balance scale. *J Korean Acad Rehab Med.* 2006;30:611-618
- 10) Harvan JR, Cotter V. An evaluation of dementia screening in the primary care setting. *J Am Acad Nurse Pract.* 2006;18:351-360
- 11) Gorp WG, Marcotte TD, Sultzer D, Hinkin C, Mahler M, Cummings JL. Screening for dementia: comparison of three commonly used instruments. *J Clin Exp Neuropsychol.* 1999;21:29-38
- 12) Shin MH, Lee YM, Park JM, Kang CJ, Lee BD, Moon E, Chung YI. A combination of the Korean version of the mini-mental state examination and Korean dementia screening questionnaire is a good screening tool for dementia in the elderly. *Psychiatry Investig.* 2011;8:348-353
- 13) Kim H, Na DL. Normative data on the Korean version of the Western Aphasia Battery. *J Clin Exp Neuropsychol.* 2004;26:1011-1120
- 14) Lee KJ, Lee CJ, Kim JH, Jung SM. Concurrent validity of the Korean test for the differential diagnosis of aphasia. *Korean J Communi Dis.* 2009;14:58-69
- 15) Wilde MC. The validity of the repeatable battery of neuropsychological status in acute stroke. *Clin Neuropsychol.* 2006;20:702-715
- 16) Pierce CA, Jewell G, Mennemeier M. Are psychophysical functions derived from line bisection reliable? *J Int Neuropsychol Soc.* 2003;9:72-78
- 17) Aben I, Verhey F, Lousberg R, Lodder J, Honig A. Validity of the Beck depression inventory, hospital anxiety and depression scale, SCL-90, and Hamilton depression rating scale as screening instruments for depression in stroke patients. *Psychosomatics.* 2002;43:386-393
- 18) Rhee MK, Lee YH, Park SH, Shon CH, Chung YJ. A standardization Study of Beck Depression Inventory 1 - Korean version (K-BDI): reliability and factor analysis. *K J Psychopathol.* 1995;4:77-95
- 19) Kim KT, Ahn JD, Lee HI, Ahn CB. Reliability and validity of modified visual analogue scale for measuring pain. *Clin Pain.* 2003;2:75-80

## Appendix. Questionnaire content.

안녕하십니까?

재활치료에 따른 결과, 즉 기능적 수준에 대한 평가는 임상가적 측면과 연구자적 측면에서 매우 중요합니다. 그러나 아직까지 재활치료의 각 영역에서 기능평가 도구에 대한 합의가 없는 실정입니다. 이에 본원에서 대학병원, 재활전문병원, 요양병원별로 환자의 치료 전, 후로 시행하고 있는 평가 척도에 대한 조사를 실시하고 있습니다. 각 병원별로 평가 도구 및 그 활용도를 조사하여 현재 우리나라에서 가장 자주 쓰이는 평가 도구를 알아보고 재활치료에 대한 평가의 실태를 알아보고자 설문을 작성하였습니다. 10분 이내의 간단한 설문이오니 귀 병원의 협조를 부탁드립니다. 본 설문내용은 재활치료 의료기관의 재활평가의 실태를 찾기 위한 것으로, 연구 이외의 목적으로는 사용되지 않을 것이며, 의료기관이나 응답자의 개인적인 불이익이나 피해가 발생하지 않도록 관리할 것을 약속드립니다.

1. 병원에서 현재 재활치료를 시행하고 계십니까?

(예/아니오, 예인 경우만 2번 해당함)

2. 재활치료를 시행하고 계시다면, 다음 중 어떤 영역의 재활치료를 시행하고 계십니까?

(중복 check 가능)

- ① 뇌재활
- ② 척수손상재활
- ③ 근골격계재활
- ④ 노인재활
- ⑤ 심장재활
- ⑥ 호흡재활
- ⑦ 절단(amputation)재활
- ⑧ 기타( )

3. 재활치료의 과정 중에 치료 전, 후로 평가를 위해 표준화된 평가도구를 이용해 정기적인 평가를 시행하고 계십니까?

(예/아니오, 예인 경우만 아래 작성하십시오)

3-1. 평가를 시행하고 계시다면, 다음을 check 하십시오. (중복 check 가능)

※ 전반적인 독립기능에 대한 평가 중 다음 중 시행하고 있는 것에 모두 표시해주세요.

- ① 수정바텔지수(Korean version of Modified Barthel Index, K-MBI)
- ② 기능적독립평가(Functional Independence Measure, FIM)
- ③ 수정랑킨척도(Modified Rankin Scale, MRS)
- ④ Stroke Impact Scale (SIS version 3.0, SIS-16)
- ⑤ NIH Stroke scale
- ⑥ 기타( )

※ 보행 및 활동, 균형기능에 대한 평가 중 다음 중 시행하고 있는 것에 모두 표시해주세요.

- ① 한국형 버그균형검사(Korean version of Berg Balance Scale, K-BBS)
- ② Timed "Up and Go" test (TUG)
- ③ Functional Ambulatory Category (FAC)
- ④ 10 meter walk test
- ⑤ Functional Reach Test
- ⑥ WISCI (Walking Index for Spinal Cord Injury)

⑦ SCIM (Spinal Cord Independence Measure)

⑧ 기타( )

※ 상지기능에 대한 평가 중 다음 중 시행하고 있는 것에 모두 표시해주세요.

① Fugle-Meyer Assessment-upper extremity (FMA)

② 9 hole Pegboard test

③ Purdue Pegboard test

④ Grooved Pegboard test

⑤ O'Connor Finger Dexterity Test

⑥ Hand grip strength test

⑦ Box and block test

⑧ Jebsen hand function test

⑨ Wolf motor function test

⑩ 기타( )

※ 인지기능에 대한 평가 중 다음 중 시행하고 있는 것에 표시해주세요.

① 한국판-간이정신상태평가(Korean version of Mini- Mental State Examination, K-MMSE)

② 간이-한국판정신상태평가(Mini-Mental State Examination-Korean version, MMSE-K)

③ CDR (Clinical Dementia Rating)

④ K-GDS (Korean form of Global Deterioraation Scale)

⑤ NCSE (Neurobehavioral Cognitive Status Examination)

⑥ CNT (Digit Span Test, Visual Span Test, Verbal Learning Test, Trail Making Test-A, Trail Making Test-B 등)

⑦ 기타( )

※ 언어기능에 대한 평가 중 다음 중 시행하고 있는 것에 모두 표시해주세요.

① 한국판 웨스턴 실어증 검사(PARADISE Korean version-Western Aphasia Battery)

② 한국판 보스턴 이름대기 검사(Korean version of Boston Naming Test, K-BNT)

③ STAND (Screening Tests for Aphasia and Neurologic- community Disorder)

④ K-FAST (Korean version of Frenchay aphasia screening test)

⑤ 기타( )

※ 지각기능(중 편측무시)에 대한 평가 중 다음 중 시행하고 있는 것에 모두 표시해주세요.

① 선나누기(Line bisection test)

② Single letter cancellation test

③ Draw-A-Man test

④ Star cancellation test

⑤ Behavioral Inattention test (BIT)

⑥ MVPT (Motor-free Visual Perception Test)

⑦ 기타( )

※ 감정기능에 대한 평가 중 다음 중 시행하고 있는 것에 모두 표시해주세요.

① 한국형 노인우울척도(Korean Form of Geriatric Depression Scale, K-GDS)

② Korean version of Beck Depression Inventory (K-BDI)

③ Hamilton Depression Rating Scale

④ 기타( )

※ 삶의 질에 대한 평가 중 다음 중 시행하고 있는 것에 모두 표시해주세요.

- ① Medical Outcome Study 36-item Short-Form Health Survey (SF-36)
- ② Medical Outcome Study 8-item Short-Form Health Survey (SF-8)
- ③ Stroke-specific Quality of Life Scale (SS-QOL)
- ④ Euroqol (EQ-5D)
- ⑤ 기타( )

※ 통증에 대한 평가 중 다음 중 시행하고 있는 것에 모두 표시해주세요.

- ① Wong-Baker FACES Pain Rating Scale
- ② Visual Analogue Scale
- ③ McGill Pain Questionnaire
- ④ Brief Pain Inventory
- ⑤ Numeric Rating Scale (NRS-11)
- ⑥ FLACC (Face Legs Arms Cry Consolability Pain Scale)
- ⑦ 기타( )

3-2. 평가한 내용을 통해 다음 중 무엇을 시행하고 계십니까?

- ① 정기적으로 재활치료 staff (의사, 치료사, 간호사 등)들이 모여서 환자에 대한 평가를 놓고 토의 및 앞으로의 계획 설정 등에 이용한다.
- ② 평가만 시행하고 기록으로 남겨둔다.
- ③ 기타 ( )

3-3. 평가한 내용을 퇴원기록차트에 첨부하십니까?

(예/아니오, 예인 경우만 아래 작성하십시오)

3-3-1. 퇴원기록차트에 평가기록을 어떻게 기록하십니까?

- ① 치료 시작 전, 후의 기록을 모두 작성함.
- ② 치료 시작 전의 기록만 작성함.
- ③ 치료 시작 후의 기록만 작성함.

4. 정기적인 평가를 시행하고 계시지 않다면, 그 이유는 무엇인지 모두 표시해주세요.

- ① 평가할 인원이 부족하거나 없어서
- ② 재활치료를 시행하는 의사, 치료사, 간호사 등의 멤버 사이에 의견이 일치되지 않아서
- ③ 아직까지 어떤 평가가 가장 좋을지 정해지지 않아서
- ④ 평가 자체가 무의미하다고 생각해서
- ⑤ 평가에 시간이 너무 많이 소요되어서
- ⑥ 돈이나 시설이 부족해서
- ⑦ 평가도구에 대한 지식이 부족해서
- ⑧ 기타( )

5. 현재 시행하고 있는 평가 시스템에 대해 만족하십니까?

- ① 매우 만족한다.



- ② 만족한다.
- ③ 만족하지는 않으나 큰 불편함도 없다.
- ④ 불만족한다.
- ⑤ 매우 불만족한다.
- ⑥ 기타( )

6. 합의된 표준화 평가도구가 정해진다면 사용하시겠습니까?

- ① 사용하겠다.
- ② 기존에 사용하던 평가도구를 그대로 사용하겠다.
- ③ 기타( )

7. 치료를 시작하기 전에 환자별로 개별적인 목표를 설정하고 계십니까?

(예/아니오, 예인 경우만 아래 작성하십시오)

7-1. 개별적인 목표를 설정한다면, 치료에 대한 평가를 통해 목표치에 얼마나 도달했는지 어떻게 기록하십니까?

- ① 개인별 목표를 설정하지만 환자에 대한 평가한 것과 목표치와는 상관없이 단순히 평가만 시행한다.
- ② 개인별 목표에 대한 달성정도를 정규적인 평가를 통해 수치나 퍼센티지(%)로 나타내 기록한다.
- ③ 개인별 목표에 대한 달성정도를 정규적인 평가를 통해 상세히 기록한다.

8. 평가도구의 표준화와 사용의 범용화를 위해 필요한 것은 다음 중 무엇이라고 생각하십니까? (중복 check가능)

- ① 표준화된 평가 리스트
- ② 표준화된 평가 방법
- ③ 평가도구와 사용 방법에 대한 지식
- ④ 돈이나 시간 문제의 해결
- ⑤ 병원들 간의 평가 방법에 대한 동의
- ⑥ 기타( )

9. 위의 설문과 관련해서 기타 저희에게 하고 싶은 말이 있으시면 아래에 기술해 주십시오.