used to be, where becoming what they used to be included resuming life activities that mattered to them (Benz, 2000). In a one year follow-up of the original study, Benz (2003) reaffirmed and extended earlier findings concluding that health care providers intended to help patients regain functional status through assessment of rehabilitation activities and patients were concerned about functional status but they were more focused on daily living from a broader perspective which included their loss of control, their fear of another stroke and the emotional effects of managing with limited function. So, the differences in how health care providers and stroke patients approach the recovery process, persists for up to one year. If health care providers want to optimize care for people who have had a stroke, the patient's voice about what matters must be part of care planning during the first year of recovering from stroke.

One way to access patient voice is through phenomenological study which queries the meaning of experience. Recent phenomenological studies that address the health experience for stroke patients have been done in the United States (Secrest & Thomas, 1999; Hilton, 2002), England (Burton, 2000) and Canada (Clarke, 2003). Eaves (2000) studied rural African-American elders using narrative analysis methods, which are another approach for pursuing the story of stroke. Each of these studies access patient voice and each will be systematically reviewed to evaluate the base for continuing study. Even without evaluation, it is apparent that a study of Japanese elders who have had a stroke could substantially broaden the scope of stroke patient voice from a cultural perspective.

Table 1 provides a framework for evaluating the studies which access the voice of stroke patients about their health. Generally, in keeping with qualitative methods, the number of participants was small (N = 5 to N = 14) and most were females. Twelve of the 39 participants studied were male participants. Phenomenological methods were most frequently used but one study cited the use of phenomenological philosophy and grounded theory methods (Burton, 2000). Table 1 provides detail about the findings. Across all five studies, findings suggest a sense of loss, effort to adjust to current uncertain health situation, and spirit to move forward. This literature base provides a foundation for the study of Japanese elders who have had a stroke. The purpose of this study was to explore the meaning of health for Japanese elders who have had a stroke.

Methods

This was a secondary analysis of an existing data set, in which participants talked for four minutes about the meaning of health. The researcher (CN) who engaged the participants to talk was a Japanese female, educated in the discipline of psychology. She first asked the participants to talk about general ideas related to health including what health means and how they know they're healthy or not healthy. Each researcher-participant dialogue progressed with these core ideas, but the actual talking content was directed by health issues raised by the participants. The language used for the dialogues was Japanese, the first language for both the researcher and the participants. Dialogues were audiotaped, transcribed and translated by the researcher who collected them. Transcriptions written in English were reviewed while listening to the audiotapes by two researchers (RT and CN) fluent in both languages. Adjustments in transcriptions were made when necessary until both researchers agreed that the English translation of the transcript accurately reflected the meaning expressed by the participant.

Analysis

An adaptation of the van Kaam approach for phenomenological analysis was used

for this study. The van Kaam approach allows for the collection a short description from a larger sample than is usually used for qualitative study (van Kaam, 1969). Data analysis occurred as a collaborative effort between researchers in Japan and the United States. Most phases of data analysis occurred through email communication (Liehr, Takahashi, Liu, Nishimura, Ito & Summers, In press). The phases of data analysis are outlined in Table 2. Generally, the Japanese team and the United States team conducted each phase of analysis independently, articulating interpretations of data, and sharing them through email. Then, discussion about team interpretations ensued through email until all researchers were satisfied that the spirit of the participant was captured in descriptive expressions, themes and definitions. Analysis was conducted over an 18-month period, during which researchers from both countries came together in person twice to move the synthesis along toward identifying the structural definition of health for Japanese elders who have had a stroke.

Table 3 provides an example dialogue with a stroke participant and Table 4 provides the descriptive expressions (Table 2, Phase 1) for this dialogue. Identification of the descriptive expressions occurred as a result of the email communication previously described. There were a total 103 descriptive expressions for all research participants. Reducing the descriptive expressions through synthesis (Table 2, Phase 2) was done in a face-to-face meeting of the Japanese and American researchers. The themes (Table 5) which were a final product of this phase of analysis led to the development of a hypothetical definition (Table 2, Phase 3) and then, the verification process outlined in phase 4 and finally determination of the structural definition, described in phase 5 (Table 2).

Participants and setting

The local review board approved the study prior to beginning data collection. Twenty-four Japanese elders, whose average age was 76 ($\pm$ 7.2) participated in this study after providing informed consent. The majority were male (n = 13) inpatients (n = 17) in a large elder care setting in metropolitan Tokyo. All participants had experienced a stroke within 12 months prior to participation. Whether inpatient or outpatient, elders talked about what health meant to them with one researcher (CN) in a single room in a hospital clinic area.

Results

Seven themes described the meaning of health for Japanese elders who had a stroke: smooth thinking and moving; fundamental valuable gift; trying to adjust to the present circumstance; past experience defining the present experience; noticing everyday markers of usual life; judging how they are doing and expressing feelings through their judgments; and, considering dimensions of everyday living from a new perspective. Table 5 lists the themes with examples of descriptive expressions associated with each theme. For Japanese elders who have had a stroke, health is:

> a fundamental valuable gift recognized as they try to adjust to their present circumstance, defined by their past experience. Everyday markers of usual life, like a good appetite and easy breathing and smooth thinking and moving let them know how they are doing. Feelings about how they are doing are expressed as judgments about their situation as they consider dimensions of everyday living from a new perspective.

Discussion

The seven themes are in some ways consistent with results from previous qualitative studies. In other ways, the themes are distinct from previous results, perhaps related to the unique cultural perspective and an older age of the participants compared to those usually studied. Each of the study themes will be evaluated in relation to the literature with the intent of understanding the uniqueness and the commonality of these stroke participants' experience of health.

"Trying to adjust the present circumstance" and "considering everyday living from a new perspective" are ideas occurring in other studies which identified the struggle associated with life change occurring with stroke. Burton (2000) addressed loss, adaptation and restructuring; Bendz (2000, 2003) found a fear of relapse and also reported efforts to reconstruct life. Hilton, (2002) reported transition and transformation and Secrest & Thomas (1999) identified a need for control, connection and independence in the midst of feeling out of control, disconnected and dependent. The literature reports a general sense that the "kind of life you're looking at is gone" (Clarke, 2003, p.181) and "survivors return to valued self-defining activities in order to maintain a positive sense of well-being…walk to the television and turn on a golf game instead play a golf" (Clarke, 2003, p.185). Stroke survivors try to avoid a recurrence, think about the next step and work at getting back to a desirable life as they adjust to their present circumstance with a new perspective.

Physical and cognitive function is impaired in stroke survivors in striking contrast to many other chronic conditions. The impact of this impairment is immense, particularly in Western countries where independence and functional ability is highly valued. The continuity and reality of self was disrupted beginning with the day of stroke onset, and survivors doubt that the eye and the "I" saw the same thing (Easton, 1999). Doolittle (1992) discussed this idea as "split self". "The individuals spoke of their brains "talking" to their bodies, and their bodies "talking back"…A limb frequently was referred to as "it", rather than "my arm" or "my leg." (Doolittle, 1992, p.122) ". The theme, smooth thinking and moving, most directly represents fluent communication or steady action. However, as the examples of descriptive expressions indicate, it also implies "thinking and moving without consciousness or intention". This theme articulates the participant's desire to transcend their limitations and be whole.

It is possible that the smooth thinking and moving theme is a unique expression of reforming self in the midst of the stroke experience. Movement or action in daily living does not normally require attention. However, careful action becomes compulsory for stroke survivors to assure safety. Every daily activity demands unusual attention. Unwanted self-consciousness is inevitable. For most healthy people, the stream of thinking is continuous and self-directed, if not disrupted by others or objects. For stroke survivors it takes great effort to keep concentration and manage their stream of thinking. They are aware of themselves as disabled. (Hilton, 2002) and at the same time, it is difficult for them to imagine themselves as disabled. They expect their reliable self but are confronted with dependence on others. One question, which may arise from these interpretations, is why the "self" is not explicitly expressed as it is, for instance, in the Hilton study (2002), where self-focused themes like loss, helplessness and regret are reported. This might be explained by the Japanese cultural context where the "concept of self is defined on the lines of interdependent relationship in contrast with Western society", (Ohnuki, 1985, p.310) and self or consciousness of myself as unity predicates how the world is experienced (Nishida, 1926, 1965) and in this case, how health is experienced.

Participants described being shocked when they were admitted to the hospital with a stroke, and they survived the acute phase. This story of shock was more readily

accessed through a research approach relying on dialogue. The predominant research approach for studying stroke survivors has routinely examined health indicators, focusing on specific health parameters from the acute to the rehabilitative period of recovery. When dialogue is the research approach, focus on health assumes broader meaning, contributing to understanding "noticing everyday markers of usual life" as a central theme for the participants. Other research has emphasized stroke patients' emotional concerns about daily living (Benz, 2003) but not this habit of using appetite and sleep quality to indicate health. Good appetite and good sleep might be a universally common expectation for people who are recovering from illness. These participants saw these common expectations as promising markers that they were getting better. On the other hand, the theme, "a fundamental valuable gift" seems to be related to faith and to put absolute value on health, expressed as a gift from Buddha or heaven. However, health and sickness are not opposite ends of a continuum but rather compatible simultaneously occurring experiences for Japanese people. Health-sickness balance or relativity is a mirror of how we are dealing with life difficulties by regarding life events as out of human control but dimensions of destiny (Ohnuki, p.105, 1985). A precious gift is a symbol of the most preferable destiny.

Potential implications related to the theme, "past experience defining present experience" may emerge from the fact that all the participants of this study consisted of elders aged 60 years and over with an average age of 76 years. In Clarke's study (2003), the central importance of physical activity for stroke survivors differed in terms of subject age. One sixty-year-old man stated "I used to curl for years and years....now look. Not so good" (Clarke, 2003, p. 181). However, six of the seven survivors aged 62 to 89 years "found a way to return to their salient roles and activities, even in a modified form, in order to maintain their sense of subjective well-being" (Clarke, 2003, p.182).

Recently, resolution of psychosocial development in early old age and later old age was described as the ninth stage in Erikson's developmental theory (Brown & Lowis, 2003). Joan Erikson, wife of Erik Erikson, as she experienced aging and witnessed her husband's later years (Erikson, 1998; Brown & Lowis, 2003) added a new ninth stage to extend her husband's original work (Erikson, 1982). In discussing the ninth stage, Joan Erikson referred to Tornstam's definition of the word "Gerotranscendence" (Tornstam, 1993) where there is a new feeling of cosmic connection which redefines time, space, life and death, and self. In adding a ninth stage Erikson noted that "Time is circumscribed to now, or maybe next week....Space has slowly decreasing dimensions within the radius of our physical capabilities...One's sense of self expands to include a wider range of interrelated others" (Erikson, 1998, p.124). With the explanations of Erikson's ninth stage of development, "past experience defining present experience" might imply a convergence of time, namely, expressions of the remembered past create meaning for the knowing-feeling-willing present moment (Takahashi & Liehr, 2004; Liehr, et al., 2002).

"Judging how they are doing and expressing feelings through their judgments" seems to be interpreted by a concept of "I" as a third person. For example, "A feeling of gladness that fills her up when a therapist tells her she is doing good"(Table 5) is the expression that a feeling comes out through judging she is doing along the lines required by a therapist. Personal feeling is not a direct response to others but rather a response to the situation formulated by "I" and others. This theme has affinity for the Japanese cultural context as did the "smooth thinking and moving" theme. "Experience of ego-focused emotions, either positive or negative, is readily accompanied, at least in Japanese culture, by felt disturbance of a relationship and, thus, by a strong need to restore harmony" (Markus & Kitayama, 1991, p.239). Although expressing feelings as judgments may seem like a uniquely Japanese view, a very similar observation can be found in data from one Western stroke survivor's statement: "I consider myself very lucky

in many ways" (Clarke, 2003, p.182). This survivor's eye sees how lucky she is through interrelated others' eyes. Our cross-cultural work often concludes with an understanding of how people on opposite sides of the world are more often alike than different (Liehr & Takahashi, 2000; Liehr et al., 2002). These glimpses of likeness provide a compelling reason for continued collaboration with expansion of investigation to enable comparison of people from different cultures in a single study, conducted simultaneously at multiple geographically distant sites.

In conclusion, for stroke survivors, functional improvement is only one part of the health picture. Although it is the most frequently studied dimension of health it fails to account for the unresolved psychosocial burden often experienced by stroke survivors. Like the voice of stroke patients heard in previous research, these patients talked about loss, efforts to adjust, and their spirit to move forward. They also placed unique emphasis on the importance of everyday usual activities, as indicators to judge how they were progressing. To provide meaningful care for people who have survived stroke and are living everyday with its consequences, it is essential for health care providers to listen to their voice, hearing how they are unique, related to factors such as culture and age, but also how they are alike, sharing common experiences with people from diverse cultures and age groups.

References

Benz, M. (2000). Rules of relevance after a stroke. *Social Science and Medicine, 51,* 713-723.

Benz, M. (2003). The first year of rehabilitation after stroke – from two perspectives. *Scandanavian Journal of Caring, 17,* 215-222.

Brown, C. & Lowis, M.J. (2003). Psychosocial development in the elderly: An investigation into Erikson's ninth stage. *Journal of Aging Studies, 17,* 415-426.

Burton, C. R. (2000). Living with stroke: A phenomenological study. *Journal of Advanced Nursing, 32,* 301-309.

Clarke, P. (2003). Towards a greater understanding of the experience of stroke: Integrating quantitative and qualitative methods. *Journal of Aging Studies, 17,* 171-187.

Comprehensive Survey of Living Conditions of the People on Health and Welfare (2001). Available at http://www.mhlw.go.jp/toukei/saikin/hw/k-tyosa01/3-2.html (Japanese), Accessed May 18, 2004.

Doolittle, N. D. (1992). The experience of recovery following a lacunar stroke. *Rehabilitation Nursing, 17,* 122-125.

Easton, K.L. (1999). The poststroke journey: From agonizing to owning. *Geriatric Nursing, 20,* 70-76.

Eaves, Y. D. (2000). 'What happened to me': Rural African American elders' experiences of stroke, *Journal of Neuroscience Nursing, 32,* 37-48.

Erikson, E.H. (1982). *The life cycle completed: A review.* NY: Norton.

Erikson, E.H. (1998). *The life cycle completed.* Extended version with new chapters on the ninth stage by Joan M. Erikson. NY: Norton.

Hafsteinsdottir, T. B. & Grypdonck, M. (1997). Being a stroke patient: A review of the literature. *Journal of Advanced Nursing, 26,* 580-588.

Hilton, E. L. (2002). The meaning of stroke in elderly women: A phenomenological investigation. *Journal of Gerontological Nursing, 28,* 19-26.

Liehr, P., Takahashi, R., Nishimura, C., Frazier, L., Kuwajima, I. & Pennebaker, J.W. (2002). Expressing health experience through embodied language. *Journal of Nursing Scholarship, 34,* 25-30.

Markus, H. R. & Kitayama, S. (1991). Culture and the self: Implications for cognition, emotion and motivation. *Psychological Review, 98,* 224-253.

National Institute of Population and Social Security Research (NIPSSR)(2002). Population Projections for Japan as of January, 1997, NIPSSR Research series, No. 303, Tokyo
Nishida, K. (1926, 1965). *Nishida Kitaro zensyu dai 4 kan* [Nishida Kitaro: The complete works series No.4.] pp. 278-279, Tokyo: Iwanami Publishers.
Ohnuki-Tierney, E. (1985). *Nihonjin no byouki-kan* [A view on the sickness in Japanese]. Tokyo: Iwanami Publishers.
Secrest, J. A. & Thomas, S. P. (1999). Continuity and discontinuity: The quality of life following stroke. *Rehabilitation Nursing, 24*, 240-246.
Takahashi, R. & Liehr. P. (2004). His-story as a dimension of the present. *Journal of American Geriatric Society*, in press.
Thomas & S.A. Eisenhandler, eds. *Aging and the Religious Dimension.* Conn.: Greenwood Publishing Group.
Tornstam, L. (1993). Gerotranscendence: A theoretical and empirical exploration. In L.E. Thomas & S.A. Eisenhandler, eds. *Aging and the Religious Dimension.* Connecticut: Greenwood Publishing.
World Development Report (1999/2000). New York: Oxford University Press.

Table 1: Research Accessing the Voice of Stroke Patients About Their Health Experience

Study	Participants	Purpose	Design	Findings
Secrest & Thomas, 1999	N = 14 (7 men & 7 women) 40 – 93 years 9 – 23 months post-stroke Tennesee, USA	Investigate quality of life following rehabilitation for stroke	Existential-Phenomenology methodology; one 90 – 120 minute interview	-independence/dependence, -in control/out of control, -connection/disconnection; Experience of loss and effort; Continuity with discontinuity.
Burton, 2000	N = 6 (2 men & 4 women) 52 - 81 years at first stroke to 1 year England	Identify the lived experience of recovering from stroke	Phenomenology grounded theory methodology; 8 – 15, 35-minute interviews	Physical, social and emotional philosophy & restructuring and adaptation; Aspects of pre-stroke life used to evaluate progress but no endpoint described; Social emphasized over physical function.
Eaves, 2000	N = 6 women 56 – 79 years stroke in past 4 months North Carolina, USA	Examine the experience of stroke from the perspective of rural African-American Women	Narrative analysis; 30 to 120 minute interviews	-discovering stroke -delaying treatment -living with uncertainty -discovering the impact of stroke -restructuring life
Hilton, 2002	N = 5 women 66 – 80 years at least 1-year post-stroke	Make the "unseen, vivid" for elderly women surviving stroke and	Phenomenology method; 2 interviews, first	Women were in a state of transition, transformed by stroke -deterioration and

decline				
	Southern, USA	engaging in rehabilitation	lasting 120 minutes & second lasting less than 60 minutes	-loss and helplessness -regret -uncertainty and anxiety about future -resiliency

Table 1 (continued): Research Accessing the Voice of Stroke Patients About Their Health Experience

Clarke, 2003	N = 8 (3 men & 5 women) 60 – 81 years <1 to 9 years post-stroke Toronto, Canada	Illuminate aspects of stroke experience not covered by quantitative study	Phenomenology method; 60 to 150 minute interviews	Restricted sense of self contributing to reduced well-being -process of adaptation and continuity -necessity of coping skills -importance of social relationships

Table 2: van Kaam analysis adaptation

Phase 1. **Identify descriptive expressions** A descriptive expression is a statement that shares an idea about a human experience. Read and re-read each participant's description. Identify the descriptive expressions, succinctly articulating them in the words of the participant.

Phase 2. **Reduction through synthesis** This step has two parts. These parts occur consecutively after step one is completed. First, examine the descriptive expressions and group ones with a like idea together. Then, "reduce the concrete, vague, intricate and overlapping expressions" (van Kaam, 1968, p. 326) to identify the theme of each group of descriptive expressions. The theme is stated in the words of the researcher. The theme will appear explicitly or implicitly in most expressions and be compatible with all.

Phase 3. **Formulate a hypothetical definition of the phenomenon** The themes, which have been synthesized in the previous step are used to create a definition of the phenomenon

Phase 4. **Apply the hypothetical definition to each participant's description** The fit between the hypothetical definition and the participant's description is evaluated. The fit does not have to be perfect but correspondence is expected between the definition and what each individual described. Lack of correspondence is noted and is a source of further dialogue.

Phase 5. **Formulate the structural definition** The structural definition integrates dialogue regarding lack of correspondence with the hypothetical definition.

Table 3: Example dialogue about health

What does it mean to be healthy? Until this April tenth, my way of keeping my health had been to swim for a thousand meters. It used to be my health.

You are a swimmer? Yes, I am a champion in senior masters on butterfly. I hold a Japanese record. Swimming was my health. Along with that, I thought I had been paying attention to what I eat, though paying attention had not been very useful.

Regardless of that, your stroke happened? Yes, and on 10th, it must have had something with what I ate too, but there were three things that kept me pretty busy, I couldn't sleep, I didn't know that I could get such a big illness and even when it happened I didn't realize it would be such a big illness. After then, about for two months, I was always crying on my bed. I didn't think about being healthy at all. Finally, about this last month, I became to be able to move my feet a bit, and my hand, just a little, became to be able to move, the thought of being healthy came back to my head.

You think about health? Yes, eating, is the most important thing I think. I am feeling I have to be aware of eating. To me health right now is not to snack and to be very careful with what I eat. And I am afraid of lots of spice and salt....soy sauce. I used to eat large quantity, may be too much. So I try to eat small portion. Health is what I am doing, now it's walking. I am thinking that I have to convert my swimming to walking.

Convert swimming to walking? Yes, walking...and from now, how well my left hand gets. I am thinking my hand would not be cured completely...these days...first, until I figure out how long it would take with my right hand I decided not to do anything with my left hand...I was a head ache for therapists, but now a days, ha ha ha, I am becoming to do everything with my left hand.

Table 4: Descriptive expressions for example dialogue.

- Thinking about converting from champion swimming to walking.
- Paying attention to what she eats.
- Awareness that things kept her busy and unable to sleep before her stroke.
- Increasing ability to use her left hand.

Table 5: Themes with example descriptive expressions

Smooth thinking and moving

- Using both hands smoothly to cut sew and knit.
- Being able to move just the way he images without consciously imaging.
- Communicating smoothly with business partners to avoid wrong decisions.
- Awareness that his action is slow and dull.
- Being able to immediately do what she wants and needs without feeling reluctant and with concentration.

Fundamental valuable gift

- Thanking Buddha for inherited strong body and family that gets along well.
- The most precious gift from heaven and nothing in the world replaces its value.
- A fundamental energy to live.

Trying to adjust to the present circumstance

- Trying to get back to a normal life, dealing with his bad left hand while emphasizing readiness to hustle.
- Paying attention to what she eats.
- Having no choice but to quit smoking and reduce salt as a matter of survival.
- Persuading himself that he shouldn't be angry.

Past experience defining the present

- Surviving the troubles of war to open a pickle shop.
- Being able to work and do almost anything, like when in the military he was able to keep walking even with an open wound.

Table 5 (continued): Themes with examples of descriptive expressions

- Though she usually prayed at temple with other believers, her role in early morning temple activities has been replaced by her daughter now.
- Working hard as a housewife with no regret about it if she died.

Noticing everyday markers of usual life

- When a meal and sake tastes good.
- Waking up feeling good.
- Feeling no pain or even an itch anywhere.

Judging how they are doing (through other's eyes) and expressing feelings through that judgment

- Feeling like he has given up while waiting for muscles to get stronger.
- A feeling of gladness fills her up when a therapist tells her she is doing good.
- Thinking he cannot talk about health since he is not really healthy.

Considering dimensions of everyday living from a new perspective

- Thinking about converting from champion in swimming to walking.
- Doing what the doctor says whether she likes it or not to avoid repeating this all over again.
- Being limited by the wheelchair and facing concerns about getting around his house, getting on the train and doing steps.
- Consideration of retirement with an idea that it's not good being not healthy when you are the top of the health care products company.

添付資料　A-補２

Trying to adjust to the present health circumstances（現在の健康状態に合わせようとする）

- Being able to do things in the way he wants（何事もやりたいようにできる）
- Trying to get back to a normal life, dealing with his bad left hand while emphasizing readiness to hustle（自分を元気付けながら動かない左手を操って元の生活に戻ろうとする）
- Paying attention to what she eats（食べ物に気をつける）
- Balance in walking, eating and daily living itself（運動や食事、生活のバランスをとる）
- Being able to accomplish everyday things like working so his body doesn't become lazy（仕事など毎日の用を済ませることができれば体は鈍らない）
- Never having a major illness until 85 years old（85 歳になるまで大病をしたことがない）
- Persuading himself that he shouldn't be angry（怒ったりしないよう自分に言い聞かせる）
- Her husband becoming sick because of her sickness and being taken care of by her sons instead of her taking care of them（自分の病気のため夫が体調を崩し、息子たちの面倒をみるのではなく面倒をみてもらう）
- Having no choice but to quit smoking and reduce salt as a matter of survival（長生きするためにはタバコをやめ塩の摂取を減らす以外にない）
- Living with his wife who has aphasia by stroke（脳卒中のため失語症になった妻と生きていく）
- To do laundry and cook like other people（炊事洗濯を他の人と同じようにやる）

II.添付資料

B.　高次脳機能障害と日常生活機能に関する研究

【研究要旨】

本研究は、半側空間無視（以下,Neglect）を有する脳卒中患者の生活障害評価尺度の開発に向けた研究である。本邦で初めて、the Catherine Bergego Scale 日本語版(以下,CBS-J)による生活障害の評価とその利用可能性を検討することを目的とし、3基準(初発,右大脳半球,Neglect有り)を満たし、同意が得られた脳卒中患者20名を対象に,退院後1ヶ月の機能評価,CBS-Jによる行動観察、面接調査を実施した。対象を脳卒中重症度尺度により3群、即ち、軽度群(6名)、中等度群(10名)、重度群(4名)に分類し,CBS-J-観察得点,CBS-J-自己評価得点,CBS-J-Anosognosia得点について3群比較の結果、3群間の属性、CBS-J-自己評価得点に有意差はなかったが、CBS-J-観察得点、CBS-J-Anosognosia得点には重症度による有意差があった。

脳卒中の重症度に応じて,Neglect行動,病態失認が共に強くなることを示し、一方、日々体験している自身のNeglect行動を気づくことができない障害を示唆している。CBS-Jは、Neglectによる生活障害とその認識を評価する有用な尺度である。CBS-Jの活用可能性として看護師は、Neglect行動を評価し、患者の認識を問い、その差に注目する必要性が示唆された。

【研究目的】

脳卒中患者の発症後早期から生じる失認・失行は、患者の日常生活動作能力の負の影響要因で、リハビリテーション期(以下、リハ期)にも重要な生障害である。しかし、現在わが国では、失認により生活障害評価尺度開発に関する取り組みはなされていない。本研究の目的は,失認・失行を有する初発の右大脳半球損傷脳卒中患者を対象に、the Catherine Bergego Scale Japanese version (以下,CBS-J)を用いた生活障害を明らかにし、CBS-Jの有用性を検討する。

【研究方法】

地域中核病院に入院した脳卒中患者のうち,初発、失認・失行を有する右大脳半球損傷脳卒中患者を対象に、退院後1ヶ月時に機能評価,CBS—Jによる行動観察、面接調査を実施し、脳卒中の重症度別に3群間の比較を実施した。

1．対象

都内高齢者地域中核病院に入院した,初発、右大脳半球損傷脳卒中患者のうち

失認関連症候有り、基準を満たし、同意が得られた20名を対象とした。

2．調査方法：横断調査

退院後1ヶ月時に訪問調査した。調査項目は、属性、神経内科専門医の診断に拠る失認・失行の種類、脳卒中の重症度(以下、重症度)に The National Institutes of Health Stroke Scale(NIHSS)、日常生活動作能力に Barthel Index(BI)を用い、CBS－Jによる行動観察と半構造化面接調査 を実施した。

3．分析方法

調査時の NIHSS 総得点により対象を3群に分類し、3群間における各変数の関連を検討した。脳卒中の重症度を独立変数とし、CBS-J-観察得点、CBS-J-自己評価得点、CBS-J-Anosognosia 得点、BI、MMSE 得点について、一元配置の分散分析（α＜.05）による群間比較後、更に、Scheffe の多重比較検定をおこなった。統計解析は SPSS 11.5 J for Windows を用いた。

4．倫理的配慮

調査病院における院内倫理審査委員会の承認を受けた。研究者が、研究の目的、方法、プライバシーの保護、拒否の権利を説明し、同意書に署名を得て実施した。

【研究結果】

1．属性

対象は、20名(梗塞16名、出血4名;男性16名、女性4名;平均年齢70.4±8.13歳)、NIHSS は平均9.1±5.1点で、軽度群6名、中等度群10名、重度群4名に分類された。

2． 3群の概要および群間比較の結果

1) 3群の属性に差はなかった。

年齢、性別、発症後週数共に 3 群間で差はなかった。但し、重度群では平均年齢が他の2群より5歳高く、一方、発症後週数は、軽度群では平均6.5週であり、他の2群よりも早い傾向にあった。

2) CBS-J 得点

CBS-J-観察得点は、重症度が高いと Neglect 行動が高かった(P＝0.000)。CBS-J-自己評価得点に3群共に低く群間に差はなかった。CBS-J-Anosognosia 得点は、重症度が高いと病態失認が強かった(P＝0.000)。CBS－J10項目の Cronbach α は、観察得点、自己評価得点、Anosognosia 得点は各々0.98、0.88、0.97 であった。

3) ADL 能力

重症度が高いと BI 得点が低く、ADL 能力も低かった(P＝0.000)。

4) 全般的認知能力

重症度が高いと MMSE 得点が低く、全般的認知能力が低かった(P＝0.005)。

【考察】

1） **CBS-J の利用可能性**

CBS-J の 10 項目が ADL に即した項目で、患者を観察し患者に質問することで評価できる簡便かつ有用な尺度である。

2） **CBS-J と脳卒中重症度別生活障害**

CBS-J-観察得点、CBS-J-Anosognosia 得点が脳卒中の重症度との関連から、重症度により Neglect 行動が強く、患者自身の日々の生活における障害や病態への認識が困難であること示している。中等度群では、全般的認知能力が高く保たれていても、自己の Neglect 行動を気づくことができない障害を評価し得ることを示唆している。CBS-J により、重症度に応じた Neglect 関連の生活障害が評価できた。今後、Neglect 行動の評価と看護ケアの方向性を検討することが可能となる。

【結論】

CBS-J(the Catherine Bergego Scale　日本語版)を用いて Neglect を有する初発右大脳半球脳卒中患者の重症度別比較を行った結果、以下の点が示された。

1．CBS-J は脳卒中重症度に応じて、Neglect 行動、病態失認が強くなる。

2．脳卒中の重症度が中等度・重度の患者自身は、自身の Neglect 行動があるにもかかわらず、自己評価ができない、即ち、自身の日常生活における障害を気づくことができない障害を有すること。

CBS-J は、Neglect による生活障害とその認識を評価する有用な尺度である。CBS-J の活用可能性として、看護師は、Neglect 行動を評価し、患者の認識を問い、その差に注目する必要性が示唆された。

付録

図1. 3群のCBS観察得点：観察得点・自己評価得点・Anosgnosia得点

図2. 3群の平均BI得点

図2. 3群の平均MMES得点

表１. 対象の属性

表2. 脳卒中の重症度分類による3群の概要

表3. 脳卒中重症度別CBS-J得点3群の比較

－観察得点、自己評価得点、Anosognosia　得点－

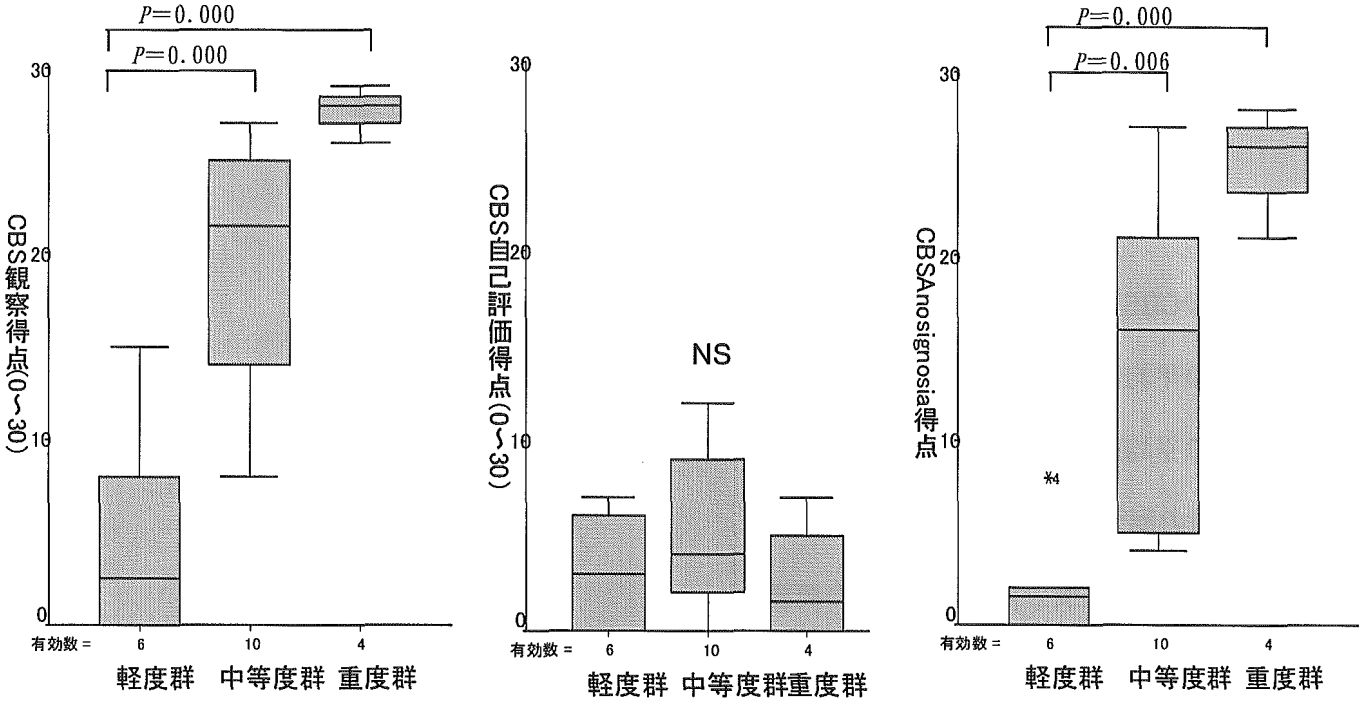

図1. 3群のCBS観察得点：観察得点・自己評価得点・Anosgnosia得点

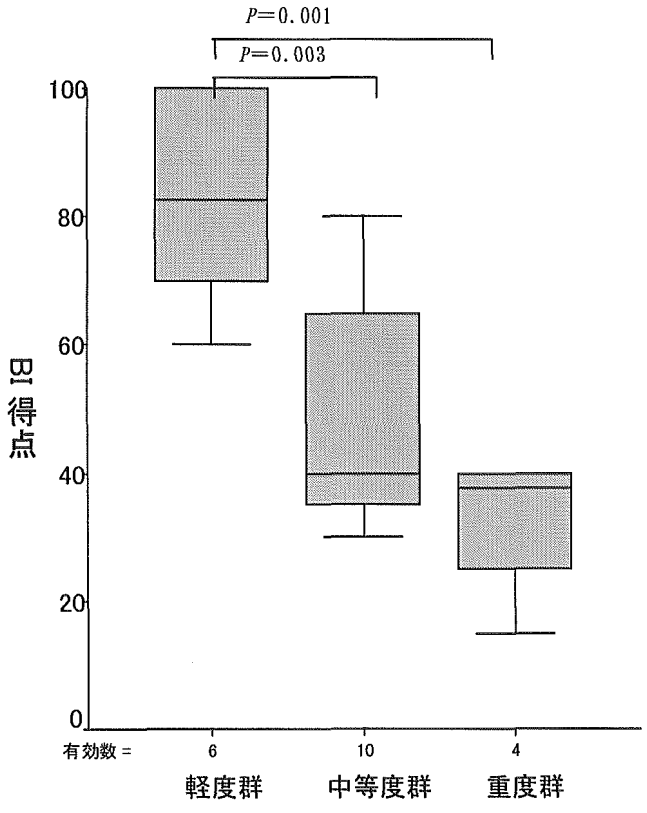

図2. 3群の平均BI得点

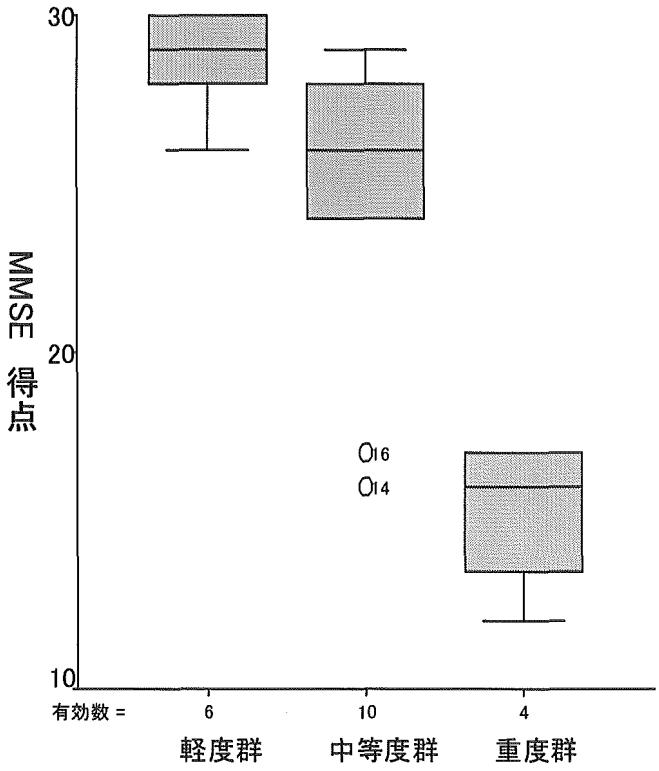

図3. 3群の平均MMSE得点

表1.　対象の属性　　N＝20　全て右利き

性別	男・女	14・6
年齢		70.4±8.1(49～83)
病名	梗塞・出血	16・4
発症後月数(ヶ月)		2.1±0.1(1～8)
失認・失行の種類		
	Neglect	19
	左右失認	1
	身体失認	2
	病態失認	7
	着衣失行	1
脳卒中重症度	NIHSS[1)]	9.2±5.2(1～19)
Neglect 行動Scale:the Catherine Bergego Scale日本語版		
CBS	観察[2)]	17.0±2.4(0～19)
CBS	自己評価[2)]	4.0±0.8(0～12)
CBS	Anosgnosia[3)]	13.2±2.3(0～28)
基本的ADL	BI[4)]	55.6±5.5(15～100)
全般的認知能力	MMSE[5)]	24.0±1.4(15～30)

1) NIHSS:the National Institutes of Health Stroke Scale (0～42
2) CBS :0～30点
3) Anosgnosia得点:(観察得点)-(自己評価得点)
4) BI :Barthel Index (0～100点)
5) MMSE :Mini-mental state examination (0～30点)
平均±標準偏差(範囲)

表2.　脳卒中重症度分類による3群の概要　　N＝20

		軽度群 M(SD)	中等度群 M(SD)	重度群 M(SD)	P 値
性別	男・女	5・1	7・3	2・2	0.637
年齢	(歳)	70.0 (4.6)	69.4 (9.4)	74.0 (6.8)	0.573
病名	梗塞・出血	5・1	8・2	2・2	0.472
発症後月数(ヶ月)		1.0 (0.0)	2.7 (2.0)	2.3 (1.3)	0.168
失認・失行の種類					
	Neglect	5	10	4	
	左右失認	—	1	—	
	身体失認	—	1	1	
	病態失認	—	4	3	
	着衣失行	1	—	—	
脳卒中重症度	NIHSS	3.0 (2.2)	9.6 (2.0)	17.0 (1.6)	.000[ab]
Neglect 行動 Scale : the Catherine Bergego Scale日本語版					
	観察	4.7 (5.9)	20.0 (6.0)	27.8 (1.1)	0.000[a]
CBS	自己評価	3.2 (3.2)	5.1 (4.0)	2.5 (2.9)	0.445
	Anosognosia	1.5 (0.7)	14.9 (8.1)	25.3 (2.6)	0.000[a]
基本的ADL	BI	82.5 (15.2)	48.5 (16.6)	32.5 (10.3)	0.000[a]
全般的認知能力	MMSE	28.7 (1.4)	24.8 (4.4)	15.3 (2.0)	0.000[b]

一元配置分散分析　有意水準 $\alpha < .05$
a:軽度群と中等度群、軽度群と重度群, b:有意差は軽度群と重度群、中等度群と重度群
M(SD):平均 (標準偏差)