

An Investigation into the Nurses' Behavior with regard to Human Caring in Japan

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【Abstract】 The purpose of this study is to identify how the concept of Human Caring appears in nurses' daily behavior and then to compare two different Asian cultures, Thailand and Japan, to identify the features of Human Caring behavior. The instrument used in this study was a self-administered questionnaire developed by the researchers. The Human Caring Meaning Questionnaire (HCMQ) is a questionnaire that consists of 35 items that exemplify the seven elements of human caring. Research in Thailand has already been carried out, and was reported in this journal in 2002. The English version of the HCMQ was translated into Japanese, and pre-tested by 50 nurses. A reliability coefficient of 0.96 resulted for the HCMQ-Japanese. The questionnaire was disseminated to nurses employed by the government and working at hospitals in Japan. The HCMQ-Japanese was distributed via the nurse supervisors of these hospitals to 565 Japanese staff nurses and nurse administrators. There were 544 respondents, a response rate of 96.3%. The completed questionnaires (526) were used for the data analysis. There were no statistically significant differences in the means of the total scores when measured according to educational background. However, significant differences ($p < 0.001$; ANOVA) were found in regard to work position held, age, and working experience. In the Thai research, for technical nurses (graduates from 2-year programs) the HCMQ score decreases as the nurses get older ($p < 0.01$; ANOVA). However, for nurses who graduated from a 4-year program, the score becomes higher according to age ($p < 0.01$; ANOVA). In this Japanese research, there were no technical nurses, and we can see the same tendency as with the Thai 4-year program in each category.

【Keywords】 human caring, nurse, behavior, questionnaire development, Japan

'Human caring' is an important concept in nursing¹⁾. In a clinical setting, human caring is achieved through nurses' daily behavior towards their patients' care. Some research has been carried out in Japan to find the effective behaviors of human caring. H. Misao et al.²⁾ made a questionnaire of 35 concrete behaviors, such as, 'nurses put patients at ease', 'nurses know how to inject'. Her team investigated which behaviors are most important to nurses and patients, and compared the nurses' prioritized behavior with that of the patients. There are some differences in the order of ranking, but almost all nurses and patients identify 'caring' behaviors as very important. J. Kataoka et al.³⁾, using a psychological phenomenological method, did qualitative research on 8 terminally-ill cancer patients, and identified 16 caring behaviors such as 'providing excellent care', and 'respecting the patient's will'. These 16 behaviors were then categorized into 5 areas, such as, 'caring which makes a relationship of mutual trust' and 'caring that

patients can notice as being supported by nurses'. H. Sumiya et al.⁴⁾ interviewed 12 nurses working at a psychiatric ward, and made the development of the steps of caring, clear. They recognized that 'age' is a large contributor to the development of caring behavior. However, no research seems to have been done on nurses' daily behavior of human caring and this research is designed to rectify this. We aim to identify how the concept of human caring appears in nurses' daily behavior and then to compare two different Asian cultures, Thailand and Japan, to identify the features of human caring behavior. These two countries are somewhat similar to each other, and different to Western culture.

The instrument used in this study was a self-administered questionnaire developed by the researchers.⁵⁾ Watson's caring concept and Lakomy's seven themes of human caring have been adapted for the questionnaire as a theoretical base to measure human caring.^{6,7)} The Human Caring Meaning Questionnaire (HCMQ) is a

questionnaire that consists of five items for each of these seven elements. Consequently, the instrument consists of the following thirty-five items :

1 . Essence of person

Understanding and loving humanity
Loving others as well as oneself
Allowing others the freedom to be human
Promoting and sustaining the human qualities of others
Understanding the reality and the meaning of life and death

2 . Relationships

Being comfortable in developing friendship with others
Being willing to develop companionship
Being sensitive to the needs of others
Providing support to others
Recognizing the uniqueness of others

3 . Choices

Understanding the values of others
Providing alternatives to others in their decision-making
Respecting the opinions of others
Respecting the rights of others
Understanding the desires of others

4 . Genuine dialogue

Using warm and kind expressions
Listening with understanding
Expressing oneself
Being able to communicate in a humanistic way
Showing willingness to communicate with others

5 . Experiential process

Being open to others
Being gentle and tender
Willingly satisfying the needs of others
Satisfying the extra needs of others
Being sympathetic to others

6 . Healing

Using “touch” in a therapeutic way
Believing in faith
Believing in hope
Being willing to help others without hesitation
Showing empathy

7 . Human/economic resources exchange

Having a social network
Having supportive exchanges

Being satisfied with one’s economic status
Being friendly to others
Having the ability to utilize supportive relationships with others

Finally, these thirty-five questions were developed into a questionnaire using a 5-point Likert type scale. The higher the score on this scale, the more positive was the perception of the meanings of human caring.

The psychometric properties of the HCMQ related to validity and reliability were assessed. The HCMQ-English version was reviewed for content validity testing by three Thai nurse researchers. After revision of the instrument, a pretest was conducted with 15 samples and the reliability coefficient of this instrument was 0.94 (Cronbach’s alpha).

Nursing research was then conducted in Thailand.⁵⁾ A questionnaire (HCMQ-Thai) was developed to evaluate nurses’ behavior of human caring in Thailand. The HCMQ-Thai is written in Thai. There were no statistically significant differences according to work position, and gender. However, significant differences were found in groups relating to their educational background and age. Higher education might be effective in influencing the performance of actions consistent with human caring. These findings are quite interesting. Behaviors consistent with human caring might be increased by education and nursing experience.

We would like to know how the Human Caring behaviors appear in Thailand and Japan. The purpose of this study is to identify the Japanese nurses’ behavior with regard to human caring, and to compare the behavior in these two groups, Thai and Japanese.

1 . Developing a questionnaire for the investigating the behavior of human caring in Japan

To carry out this research in Japan, the English version of the HCMQ was translated into Japanese. Reverse-translation was not performed, but all elements and every item was discussed carefully with the Thai researcher. The Japanese language does not fit perfectly with these English items, so it was quite difficult work.

First, we translated the English version of the HCMQ into Japanese, and asked three Japanese expert nurses, who are also researchers, to check that they could

understand the same items that the researchers had intended. It became clear that some of these abstract items were difficult to recognize easily, and needed additional explanations. Once we gave additional oral explanations, they could understand the abstract items, but without our additional comment, some statements for the items did not work. For that reason, we decided to divide the 35 items into 7 elements.

Second, the scale of “frequency” was quite problematic. ‘Attitude’ and ‘behavior’ are different. For Japanese nurses, answering questions on the ‘attitude of human caring’ is not so difficult, but answering questions about the ‘behavior of Human Caring’ is quite difficult. We decided to give 5 points if they ‘do’ the behavior at ‘anytime’ to ‘everybody’. Most of Japanese nurses change their behavior according to the situation, especially when ‘at work’ and when ‘not at work’. In Japan, ‘too much familiarity’ is not a good thing. When nurses are ‘on duty’, they behave to patients or clients in a manner full of human caring, but when they are off duty, it is not felt to be appropriate behavior to be over-familiar with others. So, we decided to ask nurses to mark the frequency of their daily activity when at work.

After making these amendments, the pretest was carried out with 50 staff nurses and nurse administrators. The reliability coefficient (Cronbach’s alpha) was 0.96 in the Japanese version of HCMQ (HCMQ-Japanese). The HCMQ-Japanese is written in Japanese.

II. Subjects and Method

Setting and sample. The target population for this study was staff nurses and nurse administrators employed by the government and working at hospitals in Japan. Confidentiality was maintained by the questionnaires being completed anonymously and by not using any form of coding. All the respondents were informed that if the results of the study were published, only group data would be revealed.

Data collection. The HCMQ-Japanese was distributed through the nurse supervisors of the hospital to 565 Japanese staff nurses and nurse administrators. There were 544 respondents, a response rate of 96.3%. The completed questionnaires (526) were used for the data analysis.

III. Results

The sample consisted predominantly of females (95.6%) with the majority of the respondents being staff nurses (84.2%). The majority of respondents were from three-year programs (nursing schools, 76.0%, nursing junior colleges, 12.9%), 10.3% held a bachelor’s degree, and 0.8% had attended a graduate program in nursing. The average age and amount of working experience were 27.9 years and 6.4 years respectively.

For all respondents, the mean score for all items was 136.1, which corresponds to a mean score of 3.89 for each item. The mean score of the respondents holding master’s or doctoral degrees was 155.5, equal to 4.44 per item, which indicated that for approximately 90% of the time, nurses performed behaviors consistent with the questionnaire (see Table 1).

There were no statistically significant differences in the means of the total scores when measured according to educational background. Nurses who hold a master or doctoral degree had the highest score on the questionnaire (mean=155.5) followed by the bachelor degree group (mean=136.6), with the three-year program group showing the lowest score for carrying out the items expressed in the questionnaire (mean=134.0, 136.2).

However, significant differences ($p < 0.001$) were found in regard to work position, age, and working experience (see Table 1). Head nurses had the highest score on the questionnaire (mean=154.0) followed by the vice-head nurse group (mean=141.2), with the staff nurse group having the lowest score (mean=134.5) ($p < 0.001$; ANOVA). According to age, the senior group (41-55 years old) had the highest score on the questionnaire (mean=151.9) followed by the 31-40 year old group (mean=137.8), with the youngest group (21-30 years old) having the lowest score (mean=134.4) ($p < 0.001$; ANOVA). According to working experience, the longest serving group (21-31 years) had the highest score on the questionnaire (mean=153.1) followed by the 11-20 years’ group (mean=140.2), and those with the shortest period of working experience (1-10 years) having the lowest score (mean=134.5) ($p < 0.001$; ANOVA).

The relationship between age and the HCMQ score for each educational group was then analyzed (see Table 2). For nurses who graduated from a nursing school, the

Table 1 Summary of the results of the analysis of variances

Source of variation	Mean	S. D.	N	F	P value
Education				1.96	.119
Three-year program					
Nursing school	136.2 (3.89)	17.73	400		
Nursing junior college	134.0 (3.83)	19.30	68		
Four-year program (Bachelor degree)	136.6 (3.90)	15.16	54		
Graduate program in Nursing	155.5 (4.44)	16.05	4		
Work Position				16.42	< .001
Staff nurse	134.5	17.44	443		
Vice head nurse	141.2	16.56	61		
Head nurse	154.0	14.92	22		
Age				15.84	< .001
21-30 years old	134.4	17.47	397		
31-40 years old	137.8	16.68	97		
41-55 years old	151.9	16.34	32		
Working experience				15.70	< .001
1-10 years	134.5	17.31	429		
11-20 years	140.2	17.28	73		
21-31 years	153.1	16.41	24		
Total	136.1 (3.89)	17.74	526		

Table 2 Mean score for HCMQ according to age & educational back-ground

	21-30 years old mean±S. D.	31-40 years old mean±S. D.	41-55 years old mean±S. D.	Significance
Nursing school	134.2±17.4 (n=284)	137.2±16.4 (n=84)	151.9±16.3 (n=32)	p< .001 (ANOVA)
Nursing junior college	133.4±19.8 (n=58)	137.4±16.8 (n=10)		p=0.55 (t-test)
Bachelor degree	136.6±15.2 (n=54)			

score becomes higher as the nurses get older ($p < 0.001$; ANOVA). The youngest group (21-30 years old) has a mean score of 134.2, but the senior group (41-55 years old) has a mean score of 151.9. For nurses who graduated from a nursing junior college, the score also becomes higher according to age. The youngest group (21-30 years old) has a mean score of 133.4, and the older group (31-40 years old) has a mean score of 137.4. This pattern was also the case for nurses who have a master's or a doctoral degree. The youngest group (21-30 years old) has a mean score of 150.0, and the older group (31-40

years old) has a mean score of 157.7.

When analyzing the 21-30 year old group only, the HCMQ score rose according to educational background. Nurses who hold a master's or a doctoral degree had the highest score on the questionnaire (mean=150.0) followed by the bachelor degree group (mean=136.6), with the three-year program groups having the lowest score for carrying out the items expressed in the questionnaire (mean=134.2, 133.4). Similarly with the 31-40 year olds, the HCMQ score also rose according to educational background. Nurses with a master's or a doctoral

Table 3 Mean score for HCMQ according to age & work position

	21-30 years-old mean±S. D. (n)	31-40 years-old mean±S. D. (n)	41-55 years-old mean±S. D. (n)	Significance
Staff nurse	134.1±17.5 (n=384)	136.6±17.6 (n=53)	140.8±14.9 (n=6)	p=0.42 (ANOVA)
Vice-head nurse	142.8±16.4 (n=13)	139.7±15.8 (n=42)	148.2±22.7 (n=6)	p=0.47 (ANOVA)

degree had the highest score on the questionnaire (mean=157.7), followed by the three-year program groups (mean=137.2, 137.4). In Thailand, the members of the masters' group were comparatively older than the members of other groups. However, in Japan, the age of the master's and doctorate group was comparatively younger than other group members.

When the HCMQ score was analyzed according to length of working experience, the results were similar to age. The HCMQ score increases with more experience.

Table 3 shows the relationship between age and the HCMQ-score for work position held (in terms of rank) and their age. For staff nurses, the score becomes higher as the nurses get older. The youngest group (21-30 years old) has a mean score of 134.1, and the senior group (41-55 years old) has a mean score of 140.8. For vice-head nurses, the scores are 142.8 (21-30 year olds), 139.7 (31-40 year olds), and 148.2 (41-55 year olds). For head nurses, the 31-40 year old group has a mean score of 130.5, but the senior group (41-55 years old) has a mean score of 156.4 ($p < 0.05$; t-test). When only the 41-55 years old group is considered, the HCMQ score rose according to the work position held. Head nurses had the highest score on the questionnaire (mean=156.4) followed by the vice-head nurse group (mean=148.2), with the staff nurse group getting the lowest score for the items expressed in the questionnaire (mean=140.8). Many of the staff nurses (86.7%) are under 30 years old. 90.9% of head nurses are over 41 years old.

IV. Discussion

Age/Experience/Position and HCMQ-score

There were no statistically significant differences in the means of the total scores when measured according to educational background. However, significant differences ($p < 0.001$; ANOVA) were found in regard to work position held, age, and working experience (see Table 1). The groups which had the highest scores on

the questionnaire were by work position, the head nurses group; by age, the senior group (41-55 years old); and by experience the most experienced group (21-31 years).

When analyzing the relationship between age and the HCMQ score for each educational group (see Table 2), nurses who graduated from a nursing school gained a higher score with increased age ($p < 0.001$; ANOVA). For nurses who graduated from a nursing junior college, the score also becomes higher according to age. This pattern was also the case for nurses who have a master's or a doctoral degree. These results mean that regardless of educational background, HCMQ score rose according to age.

Most staff nurses (86.7%) are under 30 years old and the majority (90.9%) of head nurses are over 41 years old. As the score becomes higher according to age, the higher scores of the head nurses' group might be due to the greater age of the members of this group. For staff nurses, the score also becomes higher as the nurses get older (see Table 3). We can see this trend in the head nurse group, but not for the vice-head nurse group. These results suggest that age (and/or working experience) is related to the HCMQ-score. As age rises, so the HCMQ-score becomes higher. Indou M. suggests the same tendency in her Japanese research.⁸⁾

Next we considered the work position held and its relationship to the HCMQ-score. When the 41-55 year-olds' scores only are analyzed, the HCMQ score rose according to their work position (see Table 3). Head nurses had the highest score on the questionnaire (mean=156.4) followed by the vice-head nurse group (mean=148.2), with the staff nurse group having the lowest score (mean=140.8).

It is unclear whether age and/or nursing experience necessarily increase human caring in daily nursing behavior, or whether nurses who have higher positions are more strongly conscious of the importance of human caring behavior. It is clear that there is strong relationship

between age and working experience that produces rich human caring behavior. However it is also possible for nurses who love nursing and who are full of human caring to survive in the caring situation, regardless of other factors.

Many researchers such as P. Benner⁹⁾ suggest that the caring ability develops according to age and/or working experience. In Japanese research, several case studies also suggest the same tendency that the caring ability develops according to age and/or working experience^{4,10)}.

Age/experience/position are closely related to an increase in the HCMQ-score.

Educational background and HCMQ-score

There were no statistically significant differences in the means of the total scores when measured according to educational background. However, nurses who hold a master's or a doctoral degree had the highest score on the questionnaire (mean=155.5) followed by the bachelor degree group, with the three-year program group showing the lowest score for carrying out the items expressed in the questionnaire (see Table 2).

When only 21-30 year olds are considered, the HCMQ score rose according to educational background. Nurses who hold a master's or doctoral degree had the highest score on the questionnaire followed by the bachelor degree group. When only the 31-40 years old group is considered, the HCMQ score also rose according to educational background. Nurses who hold a master's or doctoral degree had the highest score on the questionnaire (mean=157.7) followed by the three-year program group (mean=137.2, 137.4).

These results mean that educational background is probably related to the HCMQ-score. However, we cannot be totally sure of this, because the population of this research is small. To make these relationships clear, additional research will be required.

Comparison with the Thai study⁵⁾

In this Japanese research, the mean score for all items was 136.1, which corresponds to a mean score of 3.89 for each item. In the Thai research⁵⁾, the mean score for all items was 139.3, which corresponds to a mean score of 3.98 for each item. Both sets of scores are similar.

According to age, the mean scores of respondents increased from 138.6 to 139.6 in Thailand, whereas for

Japan it increased from 134.4 to 151.9. For working experience, the mean scores of respondents increased from 138.9 to 139.3 (Thai), whereas for Japan it increased from 134.5 to 153.1. It looks as though the HCMQ-score rises according to the increasing age and the length of working experience of the nurses. Indou M.⁸⁾ pointed out that the factor that most strongly influences caring in cancer nursing is 'age'. This tendency might be stronger for Japanese nurses than Thai nurses.

In the Thai research, the mean score of the 4-year program group was 140.3 and the mean score of the masters' group was 145.4. In this research, the mean score of 4-year program group is 136.6 and the mean score of the masters'/doctorate group is 155.5. Even though the Thai members of the masters' group were comparatively older (mean=40.5 years old) than the members of Japanese group (mean=32.5 years old), the change of the Thai score is not so different to the Japanese research. It seems probable that the HCMQ-score rises according to the level of education received.

In the Thai research, for technical nurses (graduates from 2-year programs), the score becomes lower as the nurses get older ($p < 0.01$; ANOVA). However, for nurses who graduated from a 4-year program, the score becomes higher according to age ($p < 0.01$; ANOVA). In this Japanese research, there were no technical nurses, and we can see the same tendency as with the Thai 4-year program in each category. We cannot be sure why the tendency (in the Thai 2-year program) happened.

On this questionnaire

When the correlation coefficient is calculated, we found a higher correlation coefficient between 'each item' and the 'total score' than the correlation coefficient between the individual 'items'. We divided the concept of human caring into actions for these 35 items, so it maybe that the concept of human caring is an integrated concept which is hard to divide into subsets. The concept of human caring is quite an abstract notion, and it cannot easily be envisaged. However, once it is defined in terms of actual actions, it is easier to recognize.

There are certain limitations to this research. Because the questionnaire is a self-evaluation tool, it does not necessarily mean that a nurse with a high score is

actually doing everything to that degree. It might be that the nurse is saying 'I am doing enough 'human caring' and do not wish to do more'. Similarly, a nurse with a low score may be saying that they want to do more human caring, but because of a heavy workload, cannot devote as much time to it as she/he would wish. In interpreting this research it is important to remember this point. It would be counter-productive for nurses to sacrifice themselves in order to get a higher HCMQ-score. By being aware of these 35 items nurses will be helped in putting human caring into practice.

V. Conclusion

This questionnaire was developed to evaluate nurses' behavior regarding human caring in Japan. There were no statistically significant differences in the means of the total scores when measured according to educational background. However, significant differences ($p < 0.001$; ANOVA) were found in regard to work position held, age, and working experience. The groups which had the highest scores on the questionnaire were by work position, the head nurses group; by age, the senior group (41-55 years old); and by experience the most experienced group (21-31 years).

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日本における看護師のヒューマンケアリング行動に関する研究

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【要旨】 「ヒューマンケアリング」の実際を具体的な看護師の行動パターンによって把握すること、および日本とタイにおける行動パターンを比較することを目的として、この調査を行なった。著者らが開発した「ヒューマンケアリング調査票」は7要素(35項目)からなる質問紙(HCMQ-English)である。これを日本語に訳して、HCMQ-Japaneseを作成し、日本の50名の看護職を対象に行なったプレテストでは、信頼性係数0.96を得た。本調査は1病院で行ない、回収数は544、回収率は96.3%であった。そのうち、35の質問項目に完全に回答していた526を対象に、分析を行なった。看護基礎教育とHCMQスコアの間には有意な関連はみられなかったが、職位/年齢/臨床経験年数とHCMQスコアの間には有意な関連があり、職位が上がるほど、また年齢/臨床経験年数が増すほど、HCMQスコアは有意に高くなっていった(ANOVA, $p < 0.001$)。日本の対象者に technical nurse がいなかったことから、どの教育背景においても、年齢や臨床経験が豊かになるほどHCMQスコアが高くなる傾向にあり、これはタイにおける4年課程の教育を受けたナースにおける傾向と同じであった。
