

Attitude about Advanced Directives among Middle-aged Using Q Methodology

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Abstract

Background/Objectives: The purpose of this study was to identify type of attitude about advanced directives among the middle-aged using Q methodology.

Method/Statistical Analysis: For the Q population, an in-depth interview and literature review were used to select 34 Q samples for Q-sort. P-sample was made with 37 middle-aged and Q-sort was performed on a 9-point scale according to their subjective agreement. The analysis by PC-QUNAL program resulted in three types.

Findings: The result of this study showed 48.1% of total variance, with 20 people (38.2%) of Type 1, 12(5.7%) of Type 2, and 5(4.2%) of Type 3. The 1st type named “yes, in principle” agreed to sign up advanced directives and disagreed life-long treatment. The people belonged to the 2nd type absolutely agreed to sign up advanced directives and thought its decision should be made on their own. This type can be called “Yes, absolutely type.” The 3rd type is “Probably I will, But” type. It means that they will be responsible for everything that might happen by family deciding to stop life-long treatment. They are unlikely to stop life-long treatment from a parent or a child position.

Improvements/Applications: As the result of this study suggests, based on classification of attitude about advanced directives among the middle-aged, intervention program for the middle-aged will need to be developed and different, individualized intervention strategies provided.

Keywords: *Attitude, Advanced directives, the Middle-aged, Q methodology, subjectivity.*

Introduction

The advancement of medicine has been enabled patients who were critically serious or unconscious to prolong their life span. Depending on life support systems, doubts were raised whether the patients themselves really wanted such life or not, prolonged their painful life meaninglessly and received life-saving treatment helplessly^[1]. In addition, even ethical dilemmas such as

disagreements were brought between medical staffs and patients' cares without expressing patients' opinions^[2]. In Korea, a special committee for life-long treatment was composed, issuing cases of Boramae and Grandma Kim. Since February, 2018, patients who were judged medically impossible have enabled to make decisions on life-long treatment themselves and executed life-time medical decision method, respecting patients' self-decision and ensuring the best interests^[3]. This means setting up standards and procedures not to be received life-long treatment enabling to end up patients' life with dignity.

What advanced directives means that a person over 19 years old must visit one of registry offices for advanced directives designated by the Ministry of Health and Welfare hear full explanation and compose intention

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forms in writing not to be treated or suspend life-long medical treatment^[4].

Advanced Directives regard human beings' dignity that all the people's life is noble to the last minute as a top priority. They can give an opportunity for patients to enhance their life in the final stage and prepare for a dignified death by discussing and deciding treatment plan along with their families and medical staffs^[1]. Middle age, proceeding for old age is a period of preparing and introspecting own death as well as experiencing indirect death of their parents and close acquaintances. Therefore, the study to understand attitudes on advanced directives is needed targeting middle age. So far, studies conducted about advanced directives were about knowledge, attitudes, educational needs, intention, etc. involved by nursing students, the elderly and health workers^[3, 5].

Since the attitudes on advanced directives were subjective and varied depending on personal experiences, sociocultural background and values, a study showing subjective recognition of middle age and considering sociocultural context was tried presenting intervention. Q method for analysing systematically and grasping its category was used in the study to know exactly what advanced directives meant. Through this study, we should know there is no meaningless life and want to use it as a fundamental material of educational program development which able to understand that life is valuable to the last minute.

Method

1. **Research Design:** Since Q method designed to measure the subjective self, latent acts of individual had each type's feature understood according to subjective structure of humans ^[6], Q method was employed to investigate attitudes type of middle age on advanced directives in this study.
2. **Concourse and Q sample:** In this study, literature review related to advanced directives was conducted and in-depth interview targeted middle aged male and female was performed to the point of saturation of the statement's material. Through this process, 90 Q populations were extracted in total. Using Q method, after altering and modifying the statements by experienced nursing professionals, 34 Q statements were finally decided.
3. **P sample:** Q method does not treat interindividual difference but intraindividual difference in significance, it is therefore enough that the number

of P sample generates factors and compare among factors. P sample for this study was aimed at 37 middle aged subjects.

4. **Q sorting:** P sample subjects were presented 34 cards written statements selected by Q samples then forced to distribute them on a nine-point scale from strongly disagree (-4), neutral (0), to strongly agree (+4) according to the degree to which they have made. The subjects should write the reasons why they chose the extremes (+4, -4) among statements. These will be utilized as useful information in interpreting each Q factor.
5. **Data analysis:** Collected data was analyzed as Q factors with PC QUANL program. For deciding ideal number of factors, the number of factors was entered variously based on the Eigen value over 1.0 then three types judged ideally were finally selected through calculated result.

Result

1. **Formation of the types:** The attitudes on advanced directives through Q factors analysis were shown as three types. After analysing weighing factors and variable quantities, three types explained approximately 48.1% of total variables; explanations per each type were 38.2% for the 1st type, 5.7% for the 2nd type and 4.2% for the 3rd type [Table 1].

Table 1. Eigen Value, Variance, and Cumulative Percentage

Variables	Type 1	Type 2	Type 3
Eigen value	14.115	2.109	1.564
Variance (%)	.382	.057	.042
Cumulative variance	.382	.439	.481

Among 37 subjects, 20 for the 1st type, 12 for the 2nd type and 5 for the 3rd type was divided, and correlation between types was as shown in [Table 2].

Table 2. Correlation Matrix between Types

Variables	Type 1	Type 2	Type 3
Type 1	1.000		
Type 2	.725	1.000	
Type 3	.672	.563	1.000

The higher factor weights a subject has within each type, the more typical characteristic the subject shows. This means that such a person represented the corresponding type.

2. Characteristics by types: To analyse characteristics by types on advanced directives, characteristics by types were described for focusing on the most positive statement ($Z \geq +1.0$) and the most negative statement ($Z \leq -1.0$) among 34 statements

Type 1: Yes, in Principle: In the 1st type, the most strongly agreed statements were ‘It is much more meaningful to spend the rest of life with one’s loved family than to receive the lifespan treatment to prolong own life. ($Z = 1.74$)’ and ‘It is right to follow the patient’s will in case of patient’s intention to stop the lifespan treatment ($Z = 1.39$).’ While the most disagreed statements in the 1st type were ‘I will not compose advanced directives because I want to receive all the available treatment until I take my last breath ($Z = -1.77$).’, ‘Tendency of neglecting life can be prevailed in societies if discontinuing life-long treatment allows ($Z = -1.44$)’. Also, the strongly agreed statements compared to other types were ‘It is most appropriate for patient’s family to decide to discontinue life-long treatment.’, ‘Educational programs at national level will be helpful and useful when making decisions on death or life-long treatment.’ in order and the most strongly disagreed statements were ‘I will encourage others like friends or colleagues to compose advanced directives.’, ‘From a parent or a child position, I feel like I have not done my duty to stop life-long treatment.’ in order.

20 subjects out of 37 in total belonged to the 1st type, and they agreed to compose advanced directives and objected to life-long treatment. They also think it is better to organize the rest of their life according to their will and meaningful to spend the rest of time with their family. Plus, they think educational programs at national level are needed. They, however, think it is most appropriate for patient’s family to decide to discontinue life-long treatment, at the same time they do not encourage others to compose advanced directives. So this type can be called “Yes, in principle”

Type 2: Yes, absolutely: In the 2nd type, the most agreed statements were ‘I will compose advanced directives because I do not think receiving life-long treatment is worth ($Z = 1.60$)’, ‘I will compose advanced directives because I think living with no consciousness is to live like a dead person in case of treating life-long treatment ($Z = 1.48$)’. The most disagreed statements in the 2nd type, on the other hand, were ‘Even though I lie without consciousness or neither control bowel nor move, I must carry on my life to the end because

human dignity is still existed ($Z = -1.90$)’, ‘Since it is not up to me to decide whether I live or die, life should be kept to the end of my life ($Z = -1.70$)’, ‘I will not compose advanced directives because I want to receive all the available treatment until I take my last breath ($Z = -1.64$)’. Also, the strongly agreed statements compared to other types were ‘I will compose advanced directives because I think living with no consciousness is to live like a dead person in case of treating life-long treatment’, ‘People should live with their own will. It is meaningless to live with the help of machines’ in order. The most strongly disagreed statements were ‘Since it is not up to me to decide whether I live or die, life should be kept to the end of my life’, ‘Educational programs at national level will be helpful and useful when making decisions on death or life-long treatment’ in order.

12 subjects out of 37 in total belonged to the 2nd type, and they objected to meaningless life-long treatment in that live unconsciously with the help of machines at the same time they strongly agreed to compose advanced directives. They think it will be painful for the family to see the process of life-long treatment and to discontinue life-long treatment keeps the dignity of human beings in situations where medical treatment is impossible. So, this type can be called “Yes, absolutely”

Type 3: Probably I will, but: In the 3rd type, the most agreed statements were ‘It is right to follow the patient’s will in case of patient’s intention to discontinue life-long treatment ($Z = 1.70$)’, ‘Advanced directives should be composed in advance as it is important to state that I have an intention to discontinue life-long treatment ($Z = 1.50$)’ in order. The most disagreed statements in the 3rd type, on the other hand, were ‘I will not compose advanced directives because I want to receive all the available treatment until I take my last breath ($Z = -2.05$)’, ‘I think medical staffs will not be likely to cure sincerely if I compose advanced directives ($Z = -1.66$)’ in order. The strongly agreed statements compared to other types were ‘Even though a member of family is in a state where recovery is impossible, I want to do all the available medical treatment I can as a family’, ‘Since it is not up to me to decide whether I live or die, life should be kept to the end of my life’ in order, and they were not revealed in other types. The most strongly disagreed statements were ‘I will compose advanced directives because I think living with no consciousness is to live like a dead person in case of treating life-long treatment’, ‘People should live with their own will. It is meaningless to live with the help of machines’ in order.

5 subjects out of 37 in total belonged to the 3rd type, and they will compose advanced directives by themselves, however they basically objected to discontinuing life-long treatment. They think life is meaningful even with the help of machine unconsciously and human life should be maintained until the end of life that God has given. In other words, they think life exists in heaven. They will compose advanced directives for themselves; it means that they will be responsible for everything that might happen by family deciding to stop life-long treatment. So, this type can be called “Probably I will, But”

The common perspectives between types were ‘I will compose advanced directives because I do not think receiving life-long treatment is worth ($Z = 1.18$)’, ‘I will compose advanced directives in advance because it will be painful for the family to see the process of life-long treatment ($Z = 1.07$)’, ‘I cannot compose advanced directives because I have little medical knowledge or experience ($Z = -1.26$)’, ‘I will not compose advanced directives because I want to receive all the available treatment until I take my last breath ($Z = -1.82$)’, etc.

Discussion

The study was carried out to divide types for attitude on advanced directives targeting middle aged by using of Q methodology. The 1st type named ‘yes, in principle’ agreed to sign up advanced directives and disagreed life-long treatment. As just shown in the study [7] for middle aged adults 82.3% of the respondents agreed to draw up advanced directives, middle aged showed interest in them. In the study [7] 80.5% of the subjects would not have life-long treatment, showing that a lot of middle aged had the same thought like the 1st type. The respondents belonged to the 1st type reported that they need education programs at national level for decision making on life-long treatment. This was proved by the study [8] that after getting an education on advanced directives for seniors at the local community, efficacy score on the understanding of advanced directives and decision making has significantly improved. It is therefore considered drawing up advanced directives through educational programs making us end life, prepare death, and reflect on life.

The people belonged to the 2nd type absolutely agreed to sign up advanced directives and thought its decision should be made on their own. It needs to be distinguished the recognition of a patient’s right to die

from death as a result of exercising the right to self-determination on medical practice [9]. They also said they would sign up advanced directives for their family, which is the same as the study found that advanced directives reduce stress, anxiety, depression of the family after the patient dies [10]. This implies that we need to be more active in signing up advanced directives.

Respondents in the 3rd reported that while they would sign up for advanced directives for themselves, they would do the entire available medical cure for their family members even though they are in a state where recovery is impossible. This is the same result shown as in the study [11] saying they stop meaningless life-long treatment for themselves, but they cannot give up their parents’ treatment. They said they would compose advanced directive for themselves, not to feeling regret or guilty if their family decides to stop treatment. After all, it is the same context as the argument that it is common for guardians to make all decisions [12]. Therefore, it is necessary to provide a chance to prepare his or her death naturally by discussing and deciding with family members about his or her life-long treatment when in healthy.

Conclusion

As a consequent of this study, since adults have intentions for composing advanced directives commonly educational strategies suitable for life cycle and program development are required for right understanding on advanced directives. To have an education with the contents of keeping human dignity at the last period of life, requiring proper treatment and cure, hospice palliative care, the reflection of life and death will instill a positive consciousness on advanced directives. It also requires a change in understanding of death and accepting it in a natural way in making decision in advance. Therefore, it is desirable to have an education on preparing for death.

Ethical Clearance: Not required

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