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An analysis of death education-related work duty on medical care providers using the dacum method

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Abstract- This study was conducted to use the findings as basic materials to develop a death education program on medical care providers. The survey period was one moth from January 5 and 30, 2015. The survey objects were nine college professors who are teaching cources related with death. The data were analyzed using the DACUM method which is effective in analyzing work duties and developing curriculum. The analysis found that among the top 10 of the 24 items related with DUTY in death education program, 'death-related medical ethics problem', 'life and death of human beings', and 'communication (notifying of death)' were found to be important in descending order. The findings of the analysis of work duties confirm the necessity of developing a death education program which, while reflecting the reality of medical sites, focuses on patient-oriented communication, at the same time. Consequently, in the death education program which will be developed in the future, it is necessary to upgrade emotional sensitivity to death among medical care providers, and strengthen the capacities of medical communication between patients and medical care providers.

Keywords- DACUM method, job analysis, duty, task, death, death education, death education program, healthcare communication

1. Introduction

Death is the ultimate experience nobody can avoid. As the subject of death is human beings, death should be understood not only in biological and medical perspectives, but also in human-centered perspective that extinction of a life and severance of social relations. Nevertheless, it is true that studies on death have been done in two separate kinds of aspects: religious, philosophical, and psychological aspects, and medical, economic, and social aspects. As a result, in such individual areas as public health and medicine, hospice, religion, philosophy, and sociology, death education programs were independently developed. Those programs have gained some achievements in the forms of death education lectures and experience programs, But the problem related with the researches which have been made up to now is that the medical and humanities perspectives on death are separate, and developed education programs also fail to accept reality consciousness and demands of objects of death education. Consequently, we came to the conclusion that only when we can integrate medical and humanitarian perspectives and reflect perceptions and attitudes on death of death education objects, effective death education is possible.

The reason why death education is not often realized for health care providers is from the fact that, even if the hospital space is where death always takes place, and medical care providers are frequently exposed to the death stress, hospital exists for the purpose of patient treatment [1]. In fact, medical care providers possess the same stress on death as common people do, and exposed to strong degree of death. And, it is well-known that communicative abilities of medical care providers contribute to psychological stability of patients, and play a certain role in treating patients [2]. Especially, doctors should play the role not only of notifying a patient who may face death sooner or later, and his or her family members of the progress of the disease and treating the patient, but of working as psychological supporter of the patient. In the sense that nurses and other public health and medical care providers in hospice and others should take care of social, economic, and psychological aspects of patients not to mention nursing including management of symptoms of patients, it is urgent to develop death education programs for them. Furthermore, since medical care providers frequently face problems of bioethics and medical ethics, they need death education as well. Controversies medical care providers can face may occur in various ways in a wide range such as justice of animal experiment, necessity of experiments using human tissue, abortion, euthanasia or death with dignity, and inevitability of organ donation and transplant, etc.

To search for problems regarding death which happens in the places of medical care, and figure out what should be treated more urgently in death education for medical care providers, it is necessary to analyze work duty of them practically and systematically. It is also necessary to analyze their specialized work duty for medical care providers to understand demands of the medical places and to their required works successfully. In addition, to develop a death education program customized for medical care providers, work duty need to be analyzed. Nevertheless, there has been little research up to now to analyze death education-related work duty. While there has been lots of research on job satisfaction and job-related stress for specific job categories, there has been little research on work duty related with death education. Probably, it is because of the fact that death education itself is the area that began to attract attention in Korean society only recently.

Besides, it is expected that the results of the analysis of job contents can contribute to making medical care providers recognize the importance of the work which has been treated lightly in the respects of frequency and emphasis.

2. Research method

The objects of this research are the nine professors in humanities and social science and medical science who are the members of the DACUM (Developing A Curriculum) Committee. The committee was organized to analyze work duty in convergence perspective. The method used in work duty analysis regarding death education was the DACUM method. The method consists of the processes of finding out 'duties' and 'works' demanded to perform specific jobs, and analyzing 'knowledge', 'techniques', and 'attitudes' related with them [3]. The DACUM Committee was organized, and DACUM W/S was held, and death education work duty was drawn out, and those work duty were converted into a questionnaire, which was applied to DACUM members.

The discussions in the DACUM W/S came to the conclusion that death education should be divided into three items on awareness of death, acceptance of death, and practice of death. The questionnaire consisted of 22 questions on DUTY and 77 questions on TASK, and was designed that the higher the score gets, the higher the frequency, importance, and difficulty are. In addition, referring to the paper of Hyang-suk Lee et al. (2010) on work duty of occupational therapists which generated the importance index, this research also drew out the importance index and used it [4]. The formula to calculate degree of importance is (importance×2)+performance frequency. It does not include difficulty.

3. Research findings

3.1. General characteristics of members of the DACUM Committee

General characteristics of the DACUM committee are as follows: 7 males (77.7%) and 2 females (22.2%); 6 of them (66.6%) worked for 15 years or less, and 3 of them (33.3%) worked for 16 years or over; The number of those who majored in public health and medical science was 4 (44.4%), and that of those who majored in humanities and social science was 5 (55.5%) <Table 1>.

Table 1. General characteristics of DACUM members

Category		N (%)
Gender	male	7(77.7)
	female	2(22.2)
Working years	15 years or less	6(66.6)
	16 years or more	3(33.3)
Major	Public health and medical science	4(44.4)
	Humanities and social science	5(55.5)
Total		9(100.0)

3.2. Comparison of frequency, importance, and difficulty of death education per aspect

Comparison of frequency, importance, and difficulty in performing death education showed that duty was the most frequent with the number of 11 (45.8%) in the aspect of awareness of death. In the performance frequency, the frequency of death awareness education was high, showing that death awareness has importance. The difficulty is 3.00 in the aspect of death practice, revealing that the difficult part of death education is death practice <Table 2>. Among 24 items on DUTY, we calculated the top 10 lists on frequency, importance, and difficulty, which showed that the average of the question of medical ethics was 3.42. It means that importance of medical ethics problems (abortion, euthanasia, organ transplant, and suicide) is high. The second highest score was 3.21 on 'life and death of human beings', followed by 3.17 on communication (notifying the patient of death), 3.13 on 'hospice and alleviating treatment 1, 2', 3.13 on 'necessity of death education', 3.09 on 'sharing the experiencing separation by death', 3.09 on 'preparation for death', 3.08 on 'fear of death', 3.05 on 'death and law', and 3.04 on 'loss and sorrow' <Figure 1>.

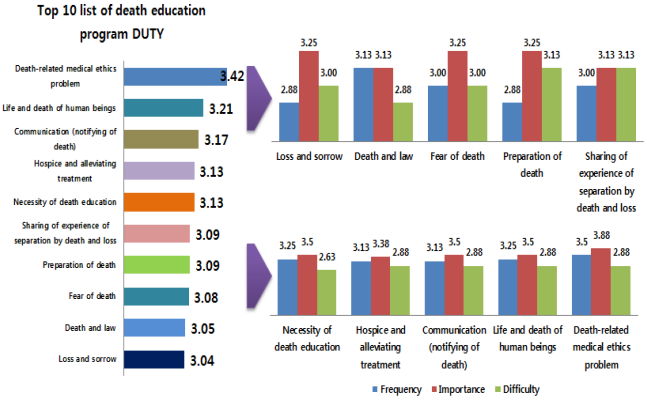

Fig. 1. Top 10 lists of death education program and means of frequency, importance and difficulty

Table 3. Importance levels per task

Importance level	N	%
11 or above	2	2.6
10 ~ 11.9	10	12.9
9 ~ 10.9	17	22.1
8 ~ 9.9	19	24.7
7 ~ 8.9	11	14.3
7 or below	18	23.4
Total	77	100.0

Table 2. Comparison of frequency, importance, and difficulty of death education per aspect M±SD

Classification	No of DUTY N(%)	No of TASK N(%)	Frequency Mean (SD)	Importance Mean (SD)	Difficulty Mean (SD)	Overall mean
Death awareness aspect	11(45.8)	28(36.3)	2.67	2.99	2.93	2.87
Death acceptance aspect	6(25.0)	22(28.6)	2.40	2.92	2.92	2.75
Death practice aspect	7(29.2)	27(35.1)	2.39	2.90	3.00	2.77

Table 4. Comparison of importance and difficulty of the tasks whose importance levels are 10 or above M±SD

Duty	Task	Frequency	Importance	Importance level	Difficulty
		Mean (SD)	Mean (SD)		Mean (SD)
Hospice and alleviating treatment 1, 2	Drug therapy	3.33±1.00	3.89±0.33	11.1	3.22±0.67
Hospice and alleviating treatment 1, 2	Symptoms of person facing death and method of dealing with them	3.33±1.00	3.89±0.33	11.1	3.33±0.70
Hospice and alleviating treatment 1, 2	First aid	3.22±0.97	3.78±0.44	10.7	3.22±0.67
Sharing of experience of separation by death and loss	per object (object of death)	3.38±0.74	3.50±0.54	10.3	3.13±0.64
Death-related medical ethics problem	Abortion	3.00±0.93	3.63±0.52	10.2	3.00±0.76
Loss and sorrow	Stress treatment	3.50±0.76	3.38±0.74	10.2	3.13±0.64
Loss and sorrow	Acceptance and understanding of death	3.50±0.76	3.38±0.74	10.2	3.38±0.52
Death and law	Organ transplant	2.44±1.13	3.89±0.33	10.2	3.33±0.71
understanding of problems with one's own death	Psychological change of terminally ill patient	3.25±0.89	3.50±0.54	10.2	3.25±0.46
Death-related medical ethics problem	Organ transplant	3.13±0.99	3.50±0.54	10.1	3.00±0.54
Sharing of experience of separation by death and loss	per case (kinds of death)	3.38±0.74	3.38±0.74	10.1	3.13±0.64
Hospice and alleviating treatment 1, 2	Subjective symptoms	3.00±0.87	3.56±0.53	10.1	3.22±0.67

3.3. Comparison of importance level per TASK and top 12 list

The examination of duty frequency depending on importance index of death education program showed that there are 19 tasks in the level between 8~9.9, the highest. The number of tasks in the level of 11 or above was 2. The number of tasks whose importance level was 7 or below was 18 (23.4%), demonstrating that it is necessary to resettle tasks whose importance levels are low <Table 3>.

3.4. Comparison of importance and difficulty of the tasks whose importance levels are 10 or above

Based on the results of <Table 3>, we compared 12 items whose importance levels were 10 or above. The two items whose importance levels were the highest with 11.1 were 'hospice and alleviating treatment 1, 2 - drug therapy', and 'hospice and alleviating treatment 1, 2 - symptoms of person facing death and method of dealing with them'. The difficulty levels of them were high with 3.22 and 3.33, respectively. On the tasks of 'hospice and alleviating treatment 1, 2 - first aid', importance level was 10.7, and difficulty level was 3.22. On 'sharing of experience of separation by death and loss - per object (object is death)' importance level was 10.3, and difficulty level was 3.13. On the following series of tasks - 'death-related medical ethics problem - abortion', 'loss and sorrow - stress treatment', 'loss and sorrow - acceptance and understanding of death', 'death and law - organ transplant', 'understanding of problems with one's own death - psychological change of terminally ill patient', all the importance levels were the same 10.2, but difficulty level varied. On the following series of tasks - 'death-related medical ethics problem - organ transplant', 'sharing of experience of separation by death and loss - per case (kinds of death)', and 'hospice and alleviating treatment 1, 2 - subjective symptoms', importance levels were the same 10.1, but difficulty level varied <Table 4>.

4. Conclusion and discussion

The study on 'death education work duty for medical care providers using the 'DACUM method' was performed to use it as basic materials to develop a death education program. Our study was initiated from the perception that there are not sufficient resources in Korea to know what duties medical care providers who observe death most frequently in the places of medical service perform related with death and what duties they consider as important, even if we accede to the reality that there are not enough attention and researches on death education. Especially, In drawing out questions on DUTY part on death education program, we were aware that the subjects of death are human beings, and included questions regarding psychological aspects of patients facing death and their family members such as 'medical communication', 'loss and sorrow', and 'fear of death', etc. in addition to those related with medical behaviors such as drug treatment and first aid. The fact that specialists in humanities and public health and medical science jointly developed questions through joint researches where they fused psychological, mental, social, and biological perspectives for this research may contribute to the significance of this research [6-8].

The findings from the death education work duty analysis can be summarized as follows. First, in the performance frequency per aspect of death education, the level of 'awareness of death aspect' was the highest. It seems

to reflect that medical care providers are high in medical knowledge and experiences related with death. On the other hand, on the 'death practice aspect' including assistance to dying person and those watching the dying person, the frequency was low, and difficulty was high. It seems to be reflect the reality in Korea that medical care providers have not sufficient experiences in medical communication to contribute to psychological stability of patients besides treatment of diseases [9-12].

Next, among 24 items related with DUTY of the death education program developed mainly by researchers in humanities and public health and medical science, the top 10 list in terms of performance frequency, importance, and difficulty showed that 'Death-related medical ethics problem', 'Life and death of human beings', and 'Communication (notifying of death)' were found to be important in descending order. The findings demonstrate that medical care providers are well aware of the importance of death-related problems, and communications with patients and their protectors. On the other hand, the levels on the items like 'preparation of death', 'fear of death', and 'loss and sorrow' were low seem to show the reality that medical care providers are not actively involved in emotional aspects of patients. In particular, the findings that performance frequency levels were low, but importance levels were high on 'preparation of death', and 'loss and sorrow' reveal the reality that, while medical care providers put importance on patient-centered communication, they do not practice it sufficiently in medical places [13-15].

Comparison of importance and difficulty levels for the tasks whose importance levels were 10 or above also demonstrated that medical care providers consider as important the areas which are realistic and whose effects are visible. In contrast, the findings that, on the items like 'loss and sorrow', and 'sharing experiences of separation by death and loss', levels of importance were low, but those of performance frequency were high seem to reflect the reality of medical places. That is, while medical care providers frequently observe patients complaining of physical pain and psychological anxiety, they perform their tasks focused on works directly related with treatment of diseases.

The analysis of work duty of medical care providers confirm the necessity of developing a death education program that, while reflecting the reality of medical sites, centers on patient-oriented communication. Due to medical knowledge and clinical experiences, medical care providers were high in the levels of understanding on 'the aspect of awareness of death' like 'definition of death' and 'process of death'. On the other hand, the levels related with 'aspects of acceptance of death' related with assistance to dying patients and those who watch them such as 'loss and sorrow' and 'understanding of problems related with one's own death were relatively low. Consequently, in the death education program and death education which will be developed in the future, it is necessary to strengthen medical communication between patients and medical care providers. When medical care providers accept the accident called death and assist dying patients, there is necessity of education to upgrade emotional sensitivity to death and makes it possible to do patient-oriented communication except for medical approach.

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