

Assessment of the efficacy of communication skills training program for oncologists

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Background. Effective communication is essential for cancer care therefore a communication skills training program was developed by the Lithuanian Association of Psychosocial Oncology. This study aims to identify the efficacy of the new program designed for Lithuanian specialists.

Materials and methods. Self-report questionnaires for health care professionals were designed. Surveys were based on three topics – stress, confidence level, and personal opinion about the training and ability to apply learned communication skills. 88(67.2%) respondents completed the questionnaire.

Results. *Stress:* 38.6% of respondents indicated that they usually experience stress while communicating with oncology patients or their relatives; *Confidence level:* 61.4% of participants agreed that their level of confidence improved after trainings. 83.0% of participants agreed that the establishment of a connection with patients and their relatives improved, but requires further development. The participants' *personal opinion* about specific aspects of the communication skills training was evaluated as well. It was found that women are more likely to think that their skill of empathy had developed, but still needed to be improved, while men believed that their empathy had not changed, or stated that it had developed and needed no further improvement ($p = 0.003$).

Conclusions. The study found improvements in participants' confidence (61.4%) and specific skills while communicating with oncology patients (75.0–90.9%). Health care professionals evaluated the program as well and very well (86.4–92.1%). The Lithuanian communication skills training program is appropriate to use to enhance the quality of cancer care.

Key words: oncology, quality of cancer care, communication skills training

INTRODUCTION

Effective communication is essential for cancer care and high quality care. It has been demonstrated that effective communication usually reduc-

es stress, anxiety, and uncertainty in patients (1) and simultaneously influences the rate of patients' recovery, ability to comply with treatments, and psychosocial adjustment (2, 3). In addition to this, it was found that effective communication affects distress levels of health care specialists (4). In order to provide oncology patients with better health care, CST programs were created. The main purpose of CST programs in oncology is to increase health care professionals' empathy and clarity

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while communicating with patients and relatives, and also to ease dealing with difficult situations during consultations (5). In the last decades, studies have shown the effectiveness of CST programs designed for physicians (6). Despite this fact, disagreements on evaluation criteria and the methods of such workshops still exist.

During the analysis of the newest scientific sources, it was found that audio or video recordings of physician and patient's consultations (real or simulated) are the most commonly reported ways to assess physicians' communication skills. Such sources enable scientists to compare health care professionals' communication skills before and after training programs. However, there is no predominant coding system of the gained skills.

According to Konopasek and co-authors (7), the effect of communication skills training programs are also measured exclusively with questionnaire surveys. These include surveys of self-efficacy, CST participants' satisfaction, health outcomes, and demonstration of skills (7). Finally, socio-demographic information-questionnaires are included in the studies as well. The analysis of the literature showed that the majority of questions, while using the questionnaire method, concern stress, confidence levels, and personal opinion about CST and changes of communication skills. In terms of the stress factor, studies show that specialists who are unable to communicate effectively with their patients tend to have higher levels of stress and more symptoms of burnout (8). The idea of the importance of confidence levels while communicating with oncology patients is based on Bandura's self-efficacy theory which states that confidence in skills is usually an indicator of actual performance (9). In addition to this, capacities that are developed in the CST programs are usually based on the needs and opinions of health care professionals; therefore, the evaluation based on the specialist's opinion is important.

The study that was performed in Lithuania (10) showed that physicians would like to improve their abilities in breaking bad news (BBN), awareness of patients' needs and psychological state, and empathy. The results of this study show that patients would like health care professionals to devote more attention to discussing daily aspects that are affected by cancer such as the influence on the patient's career (40% of respondents),

family (30% of respondents), and psychological state (30% of respondents). Regarding such facts, the Lithuanian clinical practice could be characterized as showing a lack of patient-centeredness; therefore, the Lithuanian Association of Psychosocial Oncology decided to organize a CST course for Lithuanian oncologists, nurses and other specialists dealing with oncology patients. As a basis, because of the wide practical applications and cultural similarities, the Swiss CST model was chosen. Its content is based on well-documented initiatives in Great Britain and Belgium and includes elements from a CST program for general internists developed in Basle and evaluated in a randomized controlled study (11). The Lithuanian CST program is an adaptation of the Swiss CST program that is extended according to Lithuanian health care professionals dealing with oncology patients' needs. It has a special focus on handling emotions and professional BBN. Interactive methods such as self-reflection, video analysis, exercises, and role-playing are also integrated. In 2013–2014, intensive 2-day (16 hours) workshops for ten groups of health care specialists were organized. In order to develop the application of the Lithuanian CST program and guarantee its quality, this study aims to identify the efficacy of the new program and training workshops designed for Lithuanian specialists.

MATERIALS AND METHODS

Research tools. This study is based on a questionnaire-survey measurement method. Two separate questionnaires for health care professionals and nurses and other specialists were designed. Both questionnaires contained 13 questions. In our questionnaire, respondents were asked to discuss their stress, confidence levels and willingness to participate in further CST programs, the development of a personal BBN strategy, and to express their personal opinion about the changes of their communication skills after participating in the CST program. In addition to this, participants had to evaluate various aspects of CST workshops (personal and public relevance, tutors' competences, efficacy, satisfaction, etc.). Three of these questions were multiple ones (specific aspects of CST, changes of skills after CST and stress experiences). Other questions were about their socio-demographic and professional

status: age, gender, working experience, number of patients per shift and department.

Participants

All health care professionals, nurses, and specialists, who participated in the CST program in 2013 or 2014, left their contact information and agreed to participate in the research study, and were asked to complete the questionnaire ($n = 131$). 88(67.2%) of surveys were completed. The percentage distribution of the respondents' socio-demographic characteristics is showed in Table 1. The mean age of respondents is 46.55 ± 12.25 ; the mean working experience is 15.8 ± 12.7 years.

Table 1. Descriptive statistics for respondents' characteristics

Characteristics of participants	Percentage of participants
Gender, %	
Female	90.9
Male	9.1
Specialty, %	
Health care professionals	36.4
Nurses	42
Other specialists	21.6
Participation in previous CST, %	
Yes	35.2
No	64.8

Procedure

Participants of the CST program were contacted by phone and later links to online questionnaires were sent to the respondents. Some surveys (11.4%) were also distributed to the departments of health care institutions due to the participants' requests. All of the participants agreed to participate in the study – verbal consents and approvals were received.

Analysis

In order to verify the reliability of the questionnaire, Cronbach's alpha was used. The Spearman's rank correlation coefficient was calculated to detect relationships between variables. Differences between the groups divided according to working experience, age, number of patients per day and other socio-demographic characteristics were tested using the chi-square test. Descriptive statistics were conducted for all socio-demographic

data. $P < 0.05$ was considered to be statistically significant. A statistical analysis was performed using SPSS 20.

RESULTS

The internal consistency (Cronbach's alpha) of the designed questionnaire was 0.821.

Stress levels while communicating with oncology patients or their relatives

Respondents were asked to evaluate their stress levels while communicating with oncology patients and their relatives. 38.6% of participants indicated that they usually experience stress, 55.7% stated that stress is experienced only at times and 5.7% do not experience stress at all. Our results indicate that the majority (45.5%) of respondents experienced stress for up to 1 day. Only 9.1% of participants suffered from stress for up to 1 week (Fig. 1).

Confidence levels while communicating with oncology patients and their relatives

When discussing their confidence while communicating with oncology patients, 61.4% of participants agreed that their levels of confidence improved, 36.4% believed that the confidence levels had not changed and 2.3% of respondents' confidence levels decreased after the CST program. Our research also showed correlations between self-confidence and the development of a personal BBN strategy ($r = 0.364$; $p < 0.05$). 79.5% of participants claimed that the CST program encouraged them to develop a BBN strategy.

Personal evaluation

37.5% of participants evaluated the efficacy of the CST program as good, 48.9% of respondents ranked the efficiency as very good (Table 2).

In addition, 76.1% of respondents stated that the competence of CST tutors was high. 68.2% agreed that instructors were extremely attentive to respondents' questions and issues. The interviewees' position regarding the personal (87.5%) and public (90.9%) relevance of the CST program and the respondents' satisfaction (87.5%) were evaluated as good and very good (Table 2).

Our study also indicated an important and statistically significant correlation between CST tutors' competences and the efficacy of the program

Table 2. General evaluation of the CST program (%)

Evaluation aspects of CST	Very poor	Poor	Satisfactory	Well	Very well	Missing values
Personal relevance of CST	0	2.3	10.2	29.5	58	0
Public relevance of CST	0	2.3	5.7	28.4	62.5	1.1
Competences of CST tutors	1.1	1.1	5.7	15.9	76.1	0
Tutors' attention to respondents' questions and issues	0	1.1	4.5	23.9	68.2	2.3
Efficacy of CST program	1.1	1.1	11.4	37.5	48.9	1.1
Satisfaction	0	1.1	9.1	35.2	52.3	2.3

($r = 0.548$; $p < 0.05$). CST tutors' competences statistically and significantly correlated with the participants' satisfaction with the program ($r = 0.570$; $p < 0.05$). A high and statistically significant correlation was detected between the efficacy of the CST program and the respondents' satisfaction ($r = 0.747$; $p < 0.05$).

The participants also evaluated the training impact on specific communication skills (Table 3). From 63.6 to 83.0% of the respondents indicated communication skills as improved, although the participants tended to agree that capacities still needed to be developed. 63.6% of the respondents evaluated empathy as an improved skill which still needed to be developed and 19.3% of the participants believed that this skill does not require further training. Abilities of communication with difficult (depressed, dying, angry, etc.) patients, BBN and presentation of treatment information were found to be most difficult to improve: 17.0% of the respondents believed that

their management of BBN and communication with difficult patients had not changed, and 25.0% of the participants had not changed their skills of presentation of treatment information (Table 3).

It was found that the ability to present information about further treatment is related to the development of a personal strategy ($r = 0.438$; $p < 0.05$). Also, we found that the capacity to provide adequate assistance in the case of psychiatric problems correlated with self-confidence ($r = 0.489$; $p < 0.05$). Secondly, a more efficient communication with "difficult" patients correlates with a qualitative presentation of treatment information ($r = 0.5$; $p < 0.05$) and the ability to provide adequate assistance in the case of psychiatric problems ($r = 0.445$; $p < 0.05$). The capacity to maintain real hope is related to the establishment of a connection of the patient with his/her relatives ($r = 0.505$; $p < 0.05$), understanding of patient's needs ($r = 0.519$; $p < 0.05$) and empathy ($r = 0.557$; $p < 0.05$).

Table 3. Evaluation of communication skills after the CST program (%)

Evaluation of communication skills	Improved and needs no further training	Improved and still needs to be trained	Management of the skill has not changed	Missing values
Establishment of connection with a patient and his/her relatives	6.8	83	9.1	1.1
Understanding of patient's needs	12.5	78.4	8	1.1
Breaking bad news	6.9	75	17	1.1
Empathy	19.3	63.6	14.8	2.3
Communication with difficult patients: depressed, dying, angry, etc.	6.8	75	17	1.1
Ability to provide adequate assistance in the case of psychiatric problems	5.7	75	14.8	4.5
Presentation of treatment information (only for health care professionals)	3	72	25	0
Maintenance of real hope	8	75	15.9	1.1

Comparative analysis

Participants' answers were compared according to their gender, specialties, age, working experience, average number of patients' respondent daily faces and number of participation in different CST programs. The data analysis shows that respondents whose working experience is less than 5 years tend to believe that their ability to communicate with the "difficult" patients improved significantly more than participants with longer working experience ($p = 0.005$). The results of our study show that older respondents (47 and older) more often tend to evaluate this CST program as very effective ($p = 0.006$). It was seen that women are more likely to think that their skill of empathy had developed after the CST program, but it still needs to be improved while men believed that their empathy had not changed or stated that it had been developed and needed no further improvement ($p = 0.003$).

DISCUSSION

The efficacy of the Swiss CST model was evaluated analyzing participants' video recordings of interviews with simulated patients (11). The Swiss research of CST efficacy focused on the length of patients' uninterrupted speech and the content of health care professionals' utterances; while our study was based on stress, confidence levels, and evaluation of skills' improvement. Discussing the differences, our study is original as it explores development of personal BBN strategies, enduring duration of stressful experiences, and contains more specifically defined CS. Our study was conducted in a 6-month period in order to detect the enduring effects of CST, while the Swiss research was based on evaluation just after CST. Nevertheless, some similar results were found. First of all, both studies indicate improvement of empathy responses. In addition to this, the Swiss study reports a decrease of utterances containing medical information (11). In comparison, our study indicates improvements in skill of medical information presentation (75.0%), and understanding of patients' needs (90.9%).

Our principal finding revealed that only 9.1% of the CST participants suffer from stress up to 1 week. A previous Lithuanian study (10) showed that 80.0% of oncologists, who had never participated in CST training, indicated that stress from

a bad-news encounter can last from 1 to 3 or even 5 days afterwards. This fact supports the opinion that the CST program is able to help doctors dealing with stress and can be a preventative measure for doctors' burnout syndrome (8).

According to some authors (12–14), the efficacy of CST is enduring. We aimed to assess the efficacy of CST 6 months after the program, in contrast to researchers who evaluated the efficacy of CST by the questionnaire-survey measurement method just after the program (15). 94.1% of our respondents responded that they are still using skills and information acquired during the CST program.

The analysis of the newest literature showed that self-confidence is an especially significant aspect in the studies of evaluation of CST programs. Our results confirm previous information as 61.4% of our respondents acquired an improvement in their self-confidence levels. An increase of self-confidence in communicating with oncology patients after CST was found by Brown et al. (2), Wilkinson et al. (3), and Lenzi et al. (18). According to Bialer et al. (15), participants had reported a statistically significant pre-post increase in confidence in their ability to respond to patient's anger. To compare, more than 81.8% of our respondents agreed that their ability to communicate with difficult (depressed, dying, angry, etc.) patients improved. Despite this fact, it is important to mention that in our study this skill was also evaluated as one of the abilities most difficult to change. The results of studies of CST efficacy also emphasize the significance of empathy and BBN (2, 16–18). Our study focused on these aspects and also found the following increase: 81.8% of the participants reported an improved ability of BBN and the capacity to provide adequate assistance in the case of a psychiatric problem; 82.9% of the respondents stated that their empathy increased. Little attention in the research literature is paid to establishment of connection with a patient and his/her relatives. This skill was admitted as quite improved by 89.8% of respondents in our study.

Our study revealed that the content of a new CST program has an impact on the effective usage of gained skills. We established correlations between the capacity to provide adequate assistance in the case of a psychiatric problem and

self-confidence and more efficient communication with difficult patients and the qualitative presentation of a further treatment plan.

Researchers that conducted a randomized study (17) found that a CST that focuses on BBN skills usually increases the efficacy of oncology residents' communication. The analysis also showed a significant increase in the rate of empathy for the trained compared with the untrained residents. Our results show that the CST program is very effective for older participants as they more often tended to evaluate the CST program as very effective than younger ones ($p = 0.006$).

The general satisfaction of the CST program in our study was high and consistent with other researchers' data. In our study, 35.2% of the participants evaluated this aspect as good and 53.3% of the respondents ranked their satisfaction as very good. To compare, Bialer et al. (15) found that 92–97% of the respondents agreed or strongly agreed to five out of six items assessing course satisfaction.

What is most important, our study detected that the preparation of tutors to run the courses is especially significant. We found correlations between tutors' competences and respondents' satisfaction ($r = 0.570$, $p < 0.001$), and the efficacy of the program and tutors' competences ($r = 0.548$; $p < 0.001$). These results prove the necessity of CST tutors' adequate training and supervision.

Discussing the limitations, due to a relatively small size of the sample and the fact that 90.9% of respondents were women, it is hard to make broad generalizations about the efficacy of the CST program. Further research on the efficacy of the CST program is necessary, especially using audio or video recordings of physician and patient's consultations (real or simulated).

CONCLUSIONS

The study of the Lithuanian CST program efficacy has found improvements in participants' confidence (64.4%) while communicating with patients after attending the CST program. It was found that health care professionals evaluate the CST program as good and very good (from 86.4 to 92.1%). The results prove the necessity of CST tutors' training and supervision. The Lithuanian CST program was found appropriate to be used to enhance the quality of cancer care.

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ONKOLOGŲ BENDRAVIMO ĮGŪDŽIŲ TOBULINIMO EFEKTYVUMO TYRIMAS

Santrauka

Įvadas. Siekdami pagerinti bendravimą su sergančiais Lietuvos psichosocialinės onkologijos asociacijos specialistai sukūrė naują bendravimo įgūdžių tobulinimo (BĮT) programą. Jos pagrindas – Šveicarijos BĮT modelis buvo pasirinktas dėl plataus praktinio pritaikymo, kultūrinių panašumų bei profesionalių apmokymų. Darbo tikslas – įvertinti pirmosios Lietuvoje onkologų bendravimo įgūdžių tobulinimo programos efektyvumą.

Metodai. BĮT programos įvertinimui buvo sukurtos anketos, skirtos sveikatos priežiūros specialistams. Pagrindinės temos: streso, pasitikėjimo savimi lygiai ir asmeninis BĮT mokymų vertinimas. Iš viso tyrime dalyvavo 88 (67 %) specialistai.

Rezultatai. *Stresas:* 38,6 % tyrimo dalyvių patiria stresą bendraudami su onkologinėmis ligomis sergančiais pacientais ar jų artimaisiais. *Pasitikėjimas savimi:* 61,4 % respondentų teigė, kad jų pasitikėjimas savimi po BĮT mokymų išaugo, 83,0 % mano, jog jų gebėjimas užmegzti ryšį su pacientais bei jų artimaisiais pagerėjo, tačiau jį dar reikia tobulinti. Tyrimo dalyvių *asmeninė nuomonė* apie atskirus BĮT mokymų aspektus buvo gera. Nustatyta, jog moterys dažniau nei vyrai buvo linkusios manyti, kad jų empatijos įgūdžiai pagerėjo, tačiau juos dar reikia tobulinti, o vyrai savo empatijos įgūdį vertino kaip nepakitusį arba kaip patobulėjusį ir nemanė, kad jį būtina gerinti ($p = 0,003$).

Išvados. Dalyvavimas programoje padidino specialistų pasitikėjimą savimi (61,4 %), pagerino specifinius įgūdžius, reikalingus bendraujant su onkologinėmis ligomis sergančiais pacientais (75,0–90,9 %). Programa buvo įvertinta kaip „gera“ arba „labai gera“ (86,4–92,1 %). Lietuviška BĮT programa yra tinkama tobulinant sergančiųjų vėžiu sveikatos priežiūrą.

Raktažodžiai: efektyvi komunikacija, onkologija, vėžys, vėžiu sergančiųjų sveikatos priežiūros kokybė, bendravimo įgūdžių tobulinimo mokymai