

An Initiative of a Nursing Home Outreach Counseling to Improving Palliative Care in Eastern of Saxony-Anhalt, Germany

Keywords: Advance Care Planning; Case Management; Nursing Home; Outreach Counseling; Palliative Care

Abstract

Outreach programs have been usually designed to strengthen institutional services. Counseling plays an important role in palliative care for people with life-limiting conditions through building relationships between staff, patients, and families. This study aimed to initiate a nursing home outreach counseling in palliative care based on the combination of Case Management and Advance Care Planning concepts, and to pilot the implementation of developed nursing home outreach counseling for residents. Phase Model recommended by Peipe was applied for this development. Comprehensive palliative care, waiting time for initial counseling, and cost-benefits were evaluated. Descriptive and frequency statistics were used for data analysis. This article reports the initiative of nursing home outreach counseling in palliative care by two case managers at five nursing homes in the eastern Saxony-Anhalt. Multidiscipline collaboration played a crucial role in outreach counseling in palliative care for the residents.

There were three significant documents for outreach counseling in palliative care for nursing home residents:

- (1) *Palliative Care Pass*
- (2) *PalliDoc® in palliative*
- (3) *Counseling Performing Checklist*.

The findings from initial small-scale study ($n = 47$), nursing home outreach counseling indicated the effectiveness on the comprehensive palliative care and also decreased waiting time for initial counseling services. The initial counseling service was provided for 59.6 % of the residents within three days and for 34 % between four to six days ($n = 16, 34 \%$). This counseling did not greatly indicate the benefits of financial organizations.

Nursing home outreach counseling was beneficial in providing palliative care for the residents and families to meet the important aspects of death with dignity. This counseling model enhanced the ease of care management in palliative care for nursing home staff and decreased the affects of delayed receiving counseling. However, a larger confirmatory study is needed for further researches.

Introduction

The amount of nursing homes has been increasing in Germany regarding to providing support for the elderly in long-term care to ensure a dignified care and respect preferences of care at the end-of-life [1, 2]. Health insurance is mandatory in Germany and plays important roles influencing QOL among the instituted elderly [3]. However, older people prefer to live at home with their loved ones as long as possible, consequently, they often admit to nursing homes with a high age. This means, they have short length of stay in nursing home for being prepared for their dying process. Therefore, care



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management in the individual context of the elderly among care teams and networks for dignified living is one of practical-theoretical- and ethical challenges for residential care facilities.

Palliative care was defined by World Health Organization (WHO) as an approach improving the quality of life of individuals and their families who are facing problems associated with life-threatening illness, whether physical, psychological, social, or spiritual [4]. Furthermore, essential attributes of ageing-based palliative care models identified by policy were communication and coordination between providers, skill enhancement, and capacity to respond rapidly to individuals' changing needs and preferences over time [5]. Nursing home deaths and Advance Care Planning (ACP) provided advance directive care have been concerned especially during Covid-19 and beyond to promote an appropriate death with meaningful as possible for both the elderly and the family members [6].

ACP has been confirmed as a crucial intervention in improving communication, and care satisfaction as well as reduced staff distress through decision-making processes [7, 8]. Certainly, ACP strengthens the iterative process of discussion, decision-making, and documentation related to end-of-life [9]. Thus, ACP has been confirmed for improving quality of end-of-life care and patient and family satisfaction, and reduces stress, anxiety, and depression in surviving relatives [10]. Besides, Case Management (CM) was the element consistently reported in palliative care models for studies provided evidence for effectiveness on health outcomes [5, 11]. CM has been shown the benefits on providing counseling and palliative care [12,13]. Integrating CM into palliative care is a logical, feasible, and effective strategy to improve the care of seriously ill patients [14]. Regarding literature, case managers under CM concept, as patient advocates, are perfectly positioned to facilitate the necessary palliative care or end-of-life care conversation, including advance care planning, and securing the essential legal documents that clearly note the patient and support system wishes and care goals [13].

Counseling is one of the most common components providing

psycho-social support for individuals in palliative care [15]. The counseling profession needs to engage in interdisciplinary collaboration, and counseling techniques obtain an effective communication for buiding the relationships between staff, residents, and families [16]. Counseling services in long-term care with a variety of counseling purposes have been established in Germany to support care recipients and their relatives [17]. As well, the outreach counseling service has been confirmed as a practical care model in certain situations of palliative care which gives a great support for care receivers and caregivers [18].

This study was developed regarding the quality improvement and the national health policies aimed at improving ambulant palliative care services for long-term care facilities in eastern Saxony-Anhalt. By German policies, the individuals with severe advanced life-limiting illnesses and high, complex symptom burdens have right to receive the specialized outpatient palliative care (SAPV) which provides by multi-professional team with heterogeneous organizational structures in cooperation with primary care givers [19]. Therefore, nursing home outreach counseling service based on the combination of ACP and CM concepts should be practical and beneficial in providing palliative care for the residents and families to meet the important aspects of death with dignity. This counseling model should also enhance the ease of care management in palliative care for nursing home staff and decrease the affects of delayed receiving counseling.

Objectives

This study aimed to initiate anursing home outreach counseling in palliative care based on the combination of Case Management and Advance Care Planning concepts, and to pilot the implementation of developed nursing home outreach counseling for the residents living in the eastern Saxony-Anhalt, Germany.

Methods

Study designs

Phase Model recommended by Peipe version 2015 was applied for planning the project management in this study [20]. This model provides guideline phases to manage the organizational project including initial phase, definition phase, planning phase, implementation phase, and closing phase. In this study, work plan structure was discussed and finally divided into two phases and four workplans (WPs) (Figure 1).

Phase 1- planning and concept development, which included *WP-1:* situation and demand analysis and *WP-2:* design of revised counseling model and

Phase 2- performing the initial small-scale study of the implementation of nursing home outreach counseling, this phase included *WP-3:* implementation of revised counseling model, and *WP-4:* finding dissemination.

Phase-1

Collaborative work among healthare providers was performed for establishing a nursing home outreach counseling in palliative care based on the combination of CM and ACP. Before performing the revision of counseling service, counseling situations were discussed among palliative care team concerning the government policies,

the possibility to access nursing home outreach counseling, and the residents' needs and unmet needs in palliative care. In *WP-2*, the developed model of outreach counseling in palliative care and related documents were designed to providing care for nursing home residents and families. The comprehensive palliative care, waiting time for initial counseling, and cost-benefit were considered as study outcomes.

Phase 2

The initial small-scale study of nursing home outreach counseling in palliative care was conducted in five nursing homes located in Dessau-Rosslau, eastern Saxony-Anhalt, Germany.

Participants

With our limitations to reach populations in our study, purposive sampling was performed. During the study period, forty-seven residents with inclusion criteria of being 65 and older years old, living in nursing homes, and receiving the prescriptions from their physicians for palliative care participated in this study.

Case managers were selected from Palliative Care Center with inclusion criteria of

- (1) Educating in health and social science.
- (2) Having counseling experiences at least one year.
- (3) Having competences in cooperation, communication, and awareness of responsibility.
- (4) Being able to complete the study.

Data collection

Data were gathered from the residents' charts and the

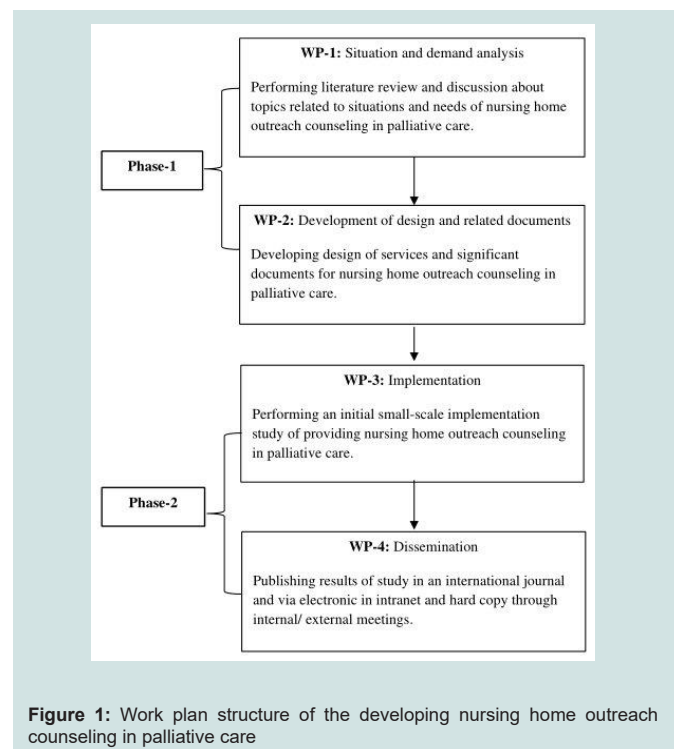


Figure 1: Work plan structure of the developing nursing home outreach counseling in palliative care

palliative care records of healthcare providers. Data included residents' characteristics: age, gender, marital status, primary diagnosis, and care grade were collected. Besides, waiting time for initial counseling, duration of receiving nursing home outreach counseling service were recorded by counting the number of days from the date of registration. The cost benefit of nursing home outreach counseling service and the needs of advice for residents and/or families regarding advance directive or living wills, decision-making authority/ power of attorney, and the symptoms in the initial assessment were identified. Data were anonymously organized and calculated by using program Excel of the Microsoft Office version 2010.

Data Analysis

Data were presented as means with standard deviation for age, waiting time for initial counseling, and duration of receiving nursing home outreach counseling service. Numbers and percentages were used for reporting for gender, marital status, primary diagnosis, care grade, present symptoms, and needs of advice for residents and/or families. In addition, the cost of providing nursing home outreach counseling in palliative care were reported the summary of income, expenses, and net balance in Euro (EUR).

Ethical Considerations

This study was approved for developing the palliative care model by a multidisciplinary team aimed at a quality improvement of palliative care, Palliative Care Center, eastern Saxony-Anhalt, Germany. The requests for permission to conduct the study in nursing homes were made by Palliative Care Center. Considering recognized standards and the Declaration of Helsinki, informed consent was obtained from individual residents or the legally authorized representative prior to participation in the small-scale implementation study. Data were gathered from the residents' charts and the palliative care records of healthcare providers and processed anonymously in an Excel database.

Results

Phase-1: Results

In this phase, the needs and situations to starting a nursing home outreach counseling in palliative care, designs of counseling services, and critical documents were analyzed and discussed among healthcare providers from Palliative Care Center and representative staff from nursing homes. In *WP-1*, we found the challenges to improve palliative care through the nursing home outreach counseling in palliative care for the residents regarding their needs of palliative care and the integrated care agreement between the SAPV and the AOK Saxony-Anhalt in accordance with § 140a ff SGB V in conjunction with § 132d, § 37b SGB V.

Design of nursing home outreach counseling

In *WP-2*, nursing home outreach counseling in palliative care based on the combination of CM and ACP concepts was designed. The revised model was created including the details of nursing home outreach counseling services which well-defined palliative care assessment, eligibility criteria for the target group, and registration system. Case manager was assigned to taking leader

roles on the collaborative work among Palliative Care Center (PCC), SAPV, ambulant hospice service in Saxony-Anhalt, and nursing homes. Nursing home staff were informed and well prepared for understanding the nursing home outreach counseling care model. They understood the eligibility criteria for the target group-specific counseling service, and registration procedure. After registration, an initial counseling was planned to provide within four weeks and service should be completed for all key domains of palliative care within three months.

In registration step, nursing home staff was assigned to assess the residents' care needs by using five care grades defined long-term care needs, the classification of the type and severity of the impairment by long-term care insurance regulated by law in the *Eleventh Book of the German Social Code (SGB XI)* [21]. Following the indication of long-term care grades guided by Federal Ministry of Health, Germany, an individual care need is determined and weighted based on impairments of independence in six modules:

Module 1: Mobility (10%)

Module 2: Mental and communication-related abilities (15%)

Module 3: Behaviour and psychological issues (15%)

Module 4: Self care (40%)

Module 5: Independent handling of requirements and challenges associated with illness or therapy – and their management (20%)

Module 6: Everyday life and social contacts (15%).

The weighted results are valued in range from 0 to 100 points, and then the values are divided into five grades of care need. The five care grades are stepped: from minimal impairment of independence or ability (care grade-1) to the most serious impairment of independence or ability, which places special demands on the provision of long-term care (care grade-5).

Significant documents

The three significant documents were developed for using in nursing home outreach counseling services including (1) Palliative Care Pass [Palliativpass], (2) PalliDoc® in palliative, (3) Counseling Performing Checklist.

Regarding to *Palliative Care Pass*, this legal document indicates the residents' living wills of self-determination at the end of their life or in health emergencies, whereas *PalliDoc® in palliative* is an online document available in platforms of *PalliDoc®* for sharing information of counseling services among the palliative care team. According to the quality of care, *Counseling Performing Checklist [Evaluation der Informationsbedarfe SAPV]* was used for measuring the comprehensive palliative care for an individual. *Counseling Performing Checklist*, derived from *SAPV-Palliative Care Assessment*, was developed by palliative care team to gain information of the residents and their contact persons and/or networks that involve in caring for the residents at the end of their life. The records included demographic data, and general information related to health insurances and/or sources of payment, the residents' diagnoses and their present symptoms. Needs of counseling were categorized into three main themes:

- (1) Treatment and medicine use
- (2) Psychosocial aspects i.e., self-management, family problems with taking care for the residents, etc.,
- (3) Plan for their end-of-life, especially about preparing the legal documents such as giving authority of decision making, and residents’s directives.

Study outcomes

Following the benefits related to three key components of study-triangle by Peipe published in 2015 [22], symbolically including *service, time, and cost* were used for evaluating the advantages of the implementation of the nursing home outreach counseling.

Service: receiving an individual comprehensive palliative careusing the *Counseling Performing Checklist* for the service evaluation.

Time: waiting time from the date of registration until the date of receiving the first counseling.

Cost: Net balance for providing outreach counseling service of Palliative Care Center.

Phase-2: results

The initial small-scale implementation study of nursing home outreach counseling in palliative care

The nursing home outreach counseling services were provided by two case managers into five nursing homes for fourty-seven residents. There were fifty-three registered residents for palliative care consultation to the PCC. There were five residents who refused to participate in the study, and one died before performing the counseling based on ACP in palliative care. Finally, data from fourty-seven residents and their families were analyzed.

The implementation of nursing home outreach counseling was carried out with residents and/or their families from five nursing homes. The demographic data were reported (Table 1), the results depicted mean age of 87.1(SD = 7.5, Max = 102, Min = 65). Of these, there were 82% over 80 years old (n = 39), 78.7% female (n = 37), and 97.9% widow (n= 46). More than half of the residents (59.6%, n = 28) received countinum care services from nursing home outreach counseling team after registration for up to one year, and 40.4 % of them (n = 19) for more than one year. The stay in service was in a wide-range from 2 days to 1,435 days (Mean = 487.2, SD = 467.8).We also found that dementia was the highest number of primary diagnosis (46.8%, n = 22) followed by carcinoma (27.7%, n = 13), stroke (8.5%, n = 4), heart failure (8.5%, n = 4), and kidney disease (8.5%, n = 4).

The results indicated a high percentage of residents with severe impairments, care grade-4, which described the most severe impairments of residents in need of care, dominates with 48.9 (n = 23). Care grade-5 was documented for 27.7% (n = 13) of residents. This is also classified as having the most severe impairments, and special requirements are placed on the nursing care profile. Care grade-3 was represented by 14.9% (n = 7), and care grade-2 by 8.5% (n = 4) of the residents.

Thirty residents received counseling being accompanied by their relatives (63.8%), for eight residents with caring nursing staff (17%), and five residents with legal guardians (10.6%), and four residents without accompanied person (8.5%). We found 72.3% (n = 34) of the residents’ underlying diseases that did not relate to diseases in oncology, whereas there were 27.7% (n = 13) of the residents diagnosed with having cancer.

There were 38 residents (80.9%) able to provide documents of power attorney. Five residents (10.6%) had documents indicating their legal guardian as their legal representative. The non-existence of written power of attorney was found by three residents (6.4%).

In this pilot study, the results depicted a mean waiting time of 3.4 days (SD = 2.3, Min = 1, Max = 14). The first outreach counseling in palliative care could be performed in nursing homes for twenty-eight residents within three days (n = 28, 59.6%), and for sixteen residents between four to six days (n = 16, 34%). Only three residents waited for the services more than seven days (6.4%) due to working overload of case managers. Considering the time use of counseling, palliative care staff spent 50 – 120 minutes (Mean = 64.3, SD = 12.6) for giving advice to each resident with/ without family in the first counseling. More than half of residents (n = 25, 53.2%) received yearly palliative care assessment.

Results from using the *Counseling Performing Checklist* for palliative care assesmnet, the residents and their families needed advice and information support related to palliative care included advance directive (N = 4, 8.5%), and decision-making authority (power of attorney) (n = 4, 8.5%). The residents and/or families received counseling about how to manage their present symptoms (Table 2) including difficulty breathing (n = 20, 42.6%), dysphagia (n = 3, 6.4%), pain (n = 9, 23.4%), nausea (n = 3, 6.4%), and fear of death (n = 4, 8.5%). All participlants received palliative care plans and handbooks.

Concerning the cost of outreach counseling recording by Palliative Care Center (Table 3), the findings indicated the little cost-

Table 1: The report of demographic data among the residents and duration of receiving care from nursing home outreach counseling in palliative care (N =47).

Data	Number	Percentage
Age (years old)(Mean age = 87.1 (SD = 7.5, Min = 65, Max = 102)		
65 – 80	8	17.0
81 – 85	8	17.0
86 – 90	15	31.9
91 – 95	13	27.7
More than 95	3	6.4
Care grade		
grade-5	13	27.7
grade-4	23	48.9
grade-3	7	14.9
grade-2	4	8.5
Duration of receiving care		
Lessthan 100	16	34.1
101 – 200 days	7	14.9
201 – 300 days	1	2.1
301 – 400 days	4	8.5
401 – 500 days	1	2.1
More than 500 days	18	38.3

benefits as positive of net balance from this small-scale pilot study with 1,327.08 EUR.

During the study period, a total 47 residents, there were 38.5% of residents (n = 13) that required emergency treatments in emergency room in hospital, and eight of them needed to be admitted in hospital. At the end of this study, 70.2% of participants (n = 33) died in nursing home. Whereas 38.3% of participants (n = 18) were transferred to the hospice center due to deterioration in their state of health and 29.8% of participants (n = 14) continued receiving services from deliverly counseling team.

Discussion

Nowadays, health insurance is mandatory in Germany, namely, most German senior citizens are covered by statutory health insurance (SHI) system or by choosing private health insurance (PHI) [3]. A comprehensive insurance obligation enacted in § 140a ff German Social Code, Book V (SGB V), German Social Code, Book V in conjunction with § 132d, § 37b SGB V, German Social Code, Book XI (SGB XI) applies for everyone who needs long-term care [21]. Those with statutory insurance are automatically enrolled in social long-term care insurance and privately insured persons must purchase private long-term care insurance. Additionally, based on framework of hospice and palliative care, it is obligatory for the health insurance to provide individual counseling services for those affected and their relatives [23].

According to palliative care, chronic diseases are at the focus of care for nursing home residents [24, 25]. They need support from health professionals to decrease their physical and mental health

Table 2: The needs of advice related to palliative care for the residents and their families

The needs of advice related to palliative care for the residents and their families (multiple count)	Number	Percentage
Advance directive or living wills	4	8.51
Decision-making authority (power of attorney)	4	8.51
The main symptoms gathering from an initial assessment	41	87.2
Difficulty breathing	20	42.6
Dysphagia	3	6.4
Pain	9	19.2
Nausea	3	6.4
Fear of death	4	8.5
No specific symptom	8	17

Table 3: Recording costs of outreach counseling in palliative care services

costs of outreach counseling in palliative care services	EUR
Incomes	
Basic flat rate	7,008.76
First assessment	2,893.54
Re-assessment	1,286.52
Total income	11,188.82
Expenses	
Flat rate for nursing home	1,440.00
Grossnursingpersonelcosts	3,826.00
Personnelcostsformedicine	3,290.00
Management costs	150.00
Total expenses	9,861.74
Net balance	1,327.08

problems for maintaining their functions and human dignity until their end-of-life [2]. Quality of life and the well-being of both residents and staff have been mentioned as sensitive indicators related to maintianing a standard quality of care in nursing homes [26]. In addition, death with dignity in in nursing home has been increasing concerned. The published results from narrative interviews in nursing homes, the author concluded the persepectives of residents’ perspectives on dying that they concerned death with dignity in the meaning of *death at the right time* with the aspects of

- (1) Being active to the very last,
- (2) Respecting one’s will and being allowed to die,
- (3) Not being in pain, and
- (4) Being amongst persons close to one [2].

Counseling services for the elderly in Germany in the past were organized by a wide range of different actors, such as insurance funds, public service, non-profit organization, and service providers [27]. Consequently, the uncoordinated counseling services and the difficulties establishing continuous case management services were discussed for improving care services.

Concerning integrated care agreements regarding the German policies and quality improvement of palliative care, the outreach counseling was developed in this study as a service in a right circumstance for the nursing home residents. The model focused on individual needs and multidisciplinary approach in palliative care to meet the important aspects of death with dignity in nursing home. This nursing home outreach counseling was intended to provide low-barrier access to palliative care services and to offer instituted elderly anticipatory therapy and treatment planning among the nursing homes residents. The basic prerequisite for this was that all those involved in the treatment were aware of the patient’s wishes and that the information could be accessed and retrieved at any time for palliative care team.

In the literature, CM has been mentioned as a key component in the care of seriously ill persons with complex needs and provides guidelines for case managers to deliver palliative care [14]. CM has been integrated in palliative care for improving symptoms, quality of life, patient- and family satisfaction with care [28]. In addition, ACP is a well-known concept for quality improvement and providing shared decision-making for end-of-life for the nursing home residents [8, 29-32]. Although ACP benefits on improving individual autonomy and communication in the context of anticipated deterioration and end-of-life care, nursing home staff ther are little refections in practices [33]. As a report of the study in Norwegian nursing homes, the findings indicated approximately two-thirds reported that they *always* or *usually* undertook ACP and only one-third of them had written guidelines [29]. The study in settings from long-term care facilities in Germany reported that ACP consultation in palliative care was offered to 46 % residents [32].

In this study, nursing home outreach counseling in palliative care was structured based on the combination of CM and ACP. This revised counseling service has resulted in the adjustment of roles and procedures of providing palliative care for the nursing home elderly.

In way of outreach counseling service, case managers from Palliative Care Center were 24/7 on-call availability. They took leader roles of offering an ACP for the instituted elderly of providing outreach counseling for an individual concerns, including physical and psychological support, and/or treatments for discomforts in health conditions at the end of their life. They identified the residents' needs and connected the residents with palliative care networks, and with the resident's family and friends for providing physical and psychological care and services directly at nursing homes. In addition, case managers focused on empowering the residents and their families by counseling services and providing skill development to manage their symptoms and difficult situations at the end of their life. This agrees with the definition of case managers as patient advocates, they are perfectly positioned to facilitate the necessary palliative care or end-of-life care conversation, including advance care planning, and securing the essential legal documents that clearly note the patient and support system wishes and care goals [13].

Palliative care has been directed by WHO to recognise the need for developing palliative care that targets all age groups of patients and families suffering from diseases or conditions in need of palliative care [34]. According to the statistical report, the needs of palliative care for the residents at the end of life in German long-term care facilities have been increasing [32]. Nowadays, other diagnoses such as dementia, stroke, Parkinson's, heart failure, kidney, liver, and lung diseases come into focus instead of cancers or tumors in palliative care and counseling services in nursing homes [19, 25]. In this study, we also found that dementia was the highest number of diagnoses for almost half of the residents among the others including carcinoma, stroke, heart failure, and kidney disease. Palliative care for the dementia people has been a special challenge because of limitations of identifying their needs, consequently they are being unfortunately still disadvantaged in palliative care for them [25].

It is noted that the elderly, especially in middle-old and oldest-old groups with physical and/or mental deterioration need different concerns for providing palliative care from the younger people. The topics related to developing a deliberate policy for the elderly who wish to finish their life have been carefully discussed. The study in the Netherlands depicted the phenomena of *ready to give up life* among the elderly from the reflective lifeworld research design [35]. These authors also presented a compassion understanding of the elderly who feel *life is completed and no longer worth living* and pointed the concerning of the differences between death wishes and depression.

According to the Long-Term Care Insurance Act (*German Social Code – SGB XI*), care is required by those persons who – due to an illness or disability – are permanently in need of help to a substantial degree [36]. Since 2015, five long-term care grades have been used to classify the type and severity of impairment in physical, mental, and/or psychological. Palliative care coverage is provided care for persons with all care grades through social or private long-term care insurance. In this study, almost all residents (76.6%) were determined their care needs as care grade-4, and care grade-5 which described the most severe impairments of residents in need of care which documented in their profiles. The results also found 17.9% of residents with care grade-3 and 8.5% of residents with care grade-2. These groups of residents could possibly continue their active life

in variety activities in nursing homes. However, elderly people often are more susceptible to health problems than other younger people. Thus, elderly may rapidly transform their health status from active into dependency or incapability. Thiel, et al. (2021) emphasized the use of counseling for promoting physical activity among the residents with the individual-level assessment as a maximum level of care with care grade-4 (out of 5) in German healthcare system [37].

The results from our study also indicated that residents and their families needed advice related to end of life care which included topics not only about medications and socio-psychological support, but also about living wills, power of attorney (decision-making authority), and place of death. It was noted by Gjerberg, et al. that the conversations among the professionals and residents was seldom, because the primarily conversations normally took place when the patient's health condition deteriorated, when the patient entered the last phase of life, or in connection with the admission interview [29]. Thus, hospitalisation, pain relief and cardiopulmonary resuscitation (CPR) were the most frequent topics that professionals most often did conversation with next of kin. Meanwhile, Cagle et al. concluded their study related to caring for dying patients in the nursing homes that the dying perspectives of residents at their end of life were identified including received good care, not being alone, suffering ended with death, hospice involved in pain and symptom management, and being physically intellectually, and emotionally prepared [38].

Likewise, an explorative study in German nursing homes focusing on living, not dying, those residents described their needs in palliative care as:

- (1) Being recognised as a person
- (2) Having a choice and being in control
- (3) Being connected to family and the world outside
- (4) Being spiritually connected
- (5) Physical comfort [26].

These concerns reflected the importance of early integration of counseling in palliative care for maintaining the quality of life until the last breath of the residents.

Even though only 6.4% (n = 3) of residents and their families did not perform the power of attorney document in this study, it also affected the quality of care for the residents in nursing homes. In these cases, the residents and the legally authorized representative received support services to manage and complete a written power of attorney. Generally, appropriate care plans and supportive documents are important for providing decent services for the instituted elderly. In this study, *Palliative Care Pass*, *PalliDoc® in palliative*, and *Counseling Performing Checklist* were developed and mainly used by palliative care team for nursing home-based counseling services. Because of concerning on these significant documents, initial medical care was possibly initiated in nursing homes for symptom management based on the wishes of residents and families in cases of crisis and/or emergency situations at the end of their life. Literatures cited that an increasing age of the elderly related to high rates of hospital admission and death [39]. The collaborative services were planned and provided by palliative care team and nursing home staff. Moreover, it may be

advisable to involve the palliative care team in the further course to avoid so-called revolving door effects in the sense of unnecessary and recurrent hospital admissions and/or emergency department visits. Thus, high percentages (70.2%) of received nursing home outreach counseling residents peacefully died in their familiar nursing home environment. The recent study review reported about documentation of older people's end-of-life care in the context of specialized palliative care that the most common clinical notes in older people's patient records concerned interventions (mostly related pharmacological interventions), problems (pain being the most frequent, followed by circulatory, nutrition, and anxiety problems), people's wishes and wellbeing-related details [40]. This report also indicated that symptom assessment tools, except for pain assessments, were rarely used.

Data sharing has been developed and used among healthcare providers in long-term care facilities aiming to increase quality of care, better evidence practice and more robustly inform regional and national policies [41]. Using technology benefits on palliative care, it enables the remote connections among patients, providers, and the care team in palliative care [42]. In this study, *PalliDoc® in palliative* was created; this on-line platform is useful and practical for providing a continuum of palliative care by the palliative care team. Counseling support as a continuous process, re-assessment was at least yearly performed regularly among the others, all significant information related palliative care such as needs of residents and family members, declarations of intention, and personal information were updated and recorded in *PalliDoc® in palliative*. This information sharing platform data can be used only among members of palliative care team with personal codes.

The findings from using *Counseling Performing Checklist* in this study presented that many aging the common symptoms at the end of life was the main topic that the residents and their families wanted to know and understand. It is interesting that nursing home residents and their families indicated only 8.5% related to their need of counseling about living wills or advance directive in this study. As well, Walther et al. reported their descriptive cross-sectional study from 363 records that a written advance directive was available for 47% of the residents in long-term care facilities in Germany [32]. Literature confirmed that ACP is a systematic approach leading to the creation of advance directives in palliative care with potential relevance to medical decision-making in German nursing homes [43]. Thus, providers included this topic in consultations in this study and the residents' living wills were also recorded among the others in resident's *Palliative Care Pass*.

Principles of advance directives and good death were important theme of counseling in palliative care. Ekberg et al. reported their review of studies that the findings identified the providers provided the opportunities for patients or family members to raise illness progression or end of life matters to discuss [44]. Early communication increases the opportunity to respect the patient's and family's needs and preferences [8]. Thus, these themes should be early concern for providing counseling for the elderly living in nursing homes. In this way of practice, the elderly's QOL have been possibly concerned to maintain since they are admitted to nursing homes until the end of their life by potential palliative care team. The

concept of good death has been recommended for applying in nursing homes. Vanderveken et al. reported their study that support of family, respect for the patient as an individual, being able to say goodbye, and euthanasia in case of unbearable suffering were important themes for a good death [45]. The authors also pointed that being able to discuss impending death with the patient and close relatives can be a great relieve for them and it is very important for healthcare providers to offer customized care for the patient.

Concerning updated palliative care needs of the residents and their family, the palliative care assessment was designed in the *Phase-1 (WP-2)* and was planned to perform the assessment every year. Because of limitations related to personal resource and corona pandemic, only half of residents could be yearly assessed in this study. The assessment included essential core elements for identifying care and treatment needs, particularly for the last stages of life. The initial assessment was completed with the issuing stated in the *Palliative Care Pass*. Reassessments were required during the care processes and were yearly carried out. In the reassessment, all necessary documents were reviewed again. The previous planning, future treatment strategies and wills were revised with the participating residents and/or authorized representatives.

As early palliative care benefit on symptoms improvement, quality of life, mood, and satisfaction [46]. Providing palliative care based on the combination of CM and ACP, early consultation about the needs related to physical- and psychological symptoms and advance directive among the others has been concerned for the residents and their families. In geropalliative care, high-quality end-of-life communication between healthcare professionals, patients and/or their family caregivers improves quality of life and reduces non-beneficial care at the end of life [47].

End-of-life communication contributes to palliative-oriented care in nursing homes by three mechanisms:

- (1) Promotion of family carers' understanding about their family member's health condition, prognosis, and treatments available
- (2) Fostering of shared decision-making between health care professionals and residents/family carers
- (3) Using and improving knowledge about residents' preferences

[48]. Although, persons with psychosocial distress, especially from their serious health problems perceived that supportive services including palliative care could alleviate their suffering, they often decline and/or avoid the services because of lack of understanding [49]. Literatures concluded that patients with incurable illness receiving early palliative care including counseling had better quality of life, less intensive medical care, improved quality outcomes, and cost savings at the end of life [50-52]. However, waiting time for counseling, receivers has been commonly perceived that it takes long time until becoming the services. The early palliative care consultation has been varying defined. For instance, Bakitas et al. defined the early initiation of concurrent palliative oncology care including in-person consultation as within 30 to 60 days of diagnosis [53]. Whereas Robbins et al. defined early palliative care consultation timing as more than 90 days before death in their retrospective cohort

study [54]. The counseling service should be carried out promptly and without a long waiting time. In this pilot study, 93.6 % of the residents received the first counseling within six days and 59.6 % within three days after registration to the case managers of the outreach counseling service. This result confirms the effects of nursing home-based counseling on decreasing the waiting time of the counseling for the residents. In addition, counseling in palliative care generally needs time for giving advice. In this outreach counseling, the counselors spent 50-120 minutes for giving the first service to each resident with/ without family in this study. Hickman, et al. concluded that the robust ACP implementation in nursing homes needed time and resources [30].

This implementation of outreach counseling in palliative care reflects the positive effects of healthcare policies which made practice for care and cost management easier than in the past. In last two decade, the establishment of independent units with specific service offers ultimately led to a rise in the cost of services, which at that time were not covered by the insurance benefits in care services for the elderly in Germany [27]. In our study, outreach counseling did not greatly indicate the benefits on financial evaluation of organizations related to providing palliative care. This is similar with the study in Turkey that did not find the advantage regarding health costs from the intervention the case management model in the palliative care [28]. However, the outreach counseling made the budget management easier than the traditional one for residents and nursing homes in this pilot study.

It was also noted that, even though nursing homes did not pay for the counseling services outside homes in the traditional counseling services, but the expenditures and barriers of service managements related to resource utilization of nursing homes such as persons and times were highly concerned. In this study, the counseling was provided by palliative care team organized by case managers from Palliative Care Center. They co-operated with outsourcing palliative care providers such as staff from SAPV and Saxony-Anhalt Hospice Service for providing ambulant services in nursing homes. These outsourcing staff and the cooperating networks received standard rate by law of the selective contract from the long-term care system. Thus, the regulations related to the payment from healthcare insurance system made cost-transparency possible because the cooperating organizations could receive a defined flat rate for each service of counseling.

Palliative care is concerned not only with all aspects of the patient's needs, but also with the needs of the family and of the health-care provider [34]. Palliative care is a professional discipline that is well positioned to work together with the care team to support the physical, emotional, social, spiritual, informational, and decision-making needs [34, 55]. As well, counselors working in places where providing new way of service, they need to engage in interdisciplinary collaboration [56]. In Germany, the report of care services for elderly in nearly past two decades indicated that social workers are mainly active within the area of counseling of the care dependent elderly and their relatives or are responsible for development and implementation of quality management approaches [27]. Interprofessional collaboration among palliative care networks has been concerned for strengthening nursing home outreach counseling service. It is interesting that the

report of a previous published study in 2022, the residents' records from long-term care facilities in Lower Saxony, Germany indicated only 6% of residents in long-term facilities got involved in caring from a specialized palliative care team and 14% from hospice service [32]. In this study, case managers were palliative care nurses from Palliative Care Center. They took roles in all processes of performing counseling services. They managed for outreach decent care for the residents and families providing by palliative care networks such as professionally trained nursing staff, social workers, spiritual carers, and staff from Specialized Ambulatory Palliative Care [*Spezialisierten Ambulanten Palliativversorgung (SAPV)*], and Saxony-Anhalt Hospice Service [*Hospizdienst Sachsen-Anhalt*].

Fulfilling palliative care needs of the residents and their families; counseling services need the persons with special training in palliative care and also need nursing home staff for service cooperation, which possible impact on daily working load among staff. Nursing homes have been long time persistent encountered with staff shortages, especially especially in the Covid-19 pandemic. It is noted from a recent study that, the number of staff hours in nursing homes did not decrease, but the perception of shortages has been driven by increased stresses and demands on staff time due to the pandemic [57]. As well, specialist palliative care alone cannot provide comprehensive palliative care covering the needs of residents and families, especially in the Covid-19 pandemic [44]. Supportive persons and/or networks play important roles in fulfilling the needs of instituted elderly in palliative care. Non-professional or informal care givers have been considered for solving this problem [58, 59]. Integrated counseling into routine work and getting support from other professionals and supportive staff should promote effective palliative care for the residents in nursing homes. In our study, case managers organized to performing outreach counseling service from collaborative networks such as physicians, professionally trained nursing staff, social services, spiritual care, or hospice employees.

In summary, this outreach counseling was designed for providing services inside nursing homes; it is practical and convenient in view of management. Case managers could organize and plan services with palliative care networks both from nursing home, and from out-source organizations. The resource utilization of such personals and time were decreased. It is noticed that the cooperative staff for outreach counseling may not need to obtain the high qualification in a crisis of staff-shortage, but they should have good competencies of responsibility, communication, organization among residents, palliative care team, institutes, and out-source services/ networks. As well as they should organize the related information and important documents by law and policies well. According to palliative care for ageing population needed essential elements related to communication and coordination between providers (including primary care), skill enhancement, and capacity to respond rapidly to individuals' changing needs and preferences over time [5]. The corona pandemics and/or other crisis situations principally impact on both care recipients and care providers. Thus, this outreach counseling is a practical care model for nursing home that promotes staff's commitment in the goal of best possible palliative care for the residents and families.

Conclusions

This nursing home outreach counseling based on the combination of CM and ACP showed the benefits on the ease of care management in palliative care, a decreasing waiting time for initial counseling and a comprehensive palliative care for the residents and families to meet the important aspects of death with dignity. Nursing home based-counseling is feasible in nursing homes even in times of a crisis situation due to COVID-19 pandemic and staff shortages. Nursing home outreach counseling could ensure the effective advance directives for the residents and their family members. It is noted that strengthening the collaborative work of nursing home outreach counseling could be designed through the combination of CM and ACP concepts, significant documents and available staff sharing platform, and relationship management among care receivers and care providers from Palliative Care Center, Palliative Care Networks, and nursing homes. However, this small-scale study was performed to testing the revised counselling in palliative care services; a larger confirmatory study and the two-group pretest-posttest design with random assignment are recommended for further researchs.

Authors' contributions

Daniel Behrendt, Nico Richter conceptualised and developed the study design. Nico Richter performed and processed the study under supervision of Daniel Behrendt. Chommanard Sumngern and Daniel Behrendt prepared the drafts of the manuscript. All authors critically commented on the draft versions and approved the final manuscript. Daniel Behrendt is guarantor who accepts full responsibility for the finished work and the conduct of the study, had access to the data, and controlled the decision to publish.

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