

## University of Rhode Island DigitalCommons@URI

College of Nursing Faculty Publications

College of Nursing

2014

## Reflective STRENGTH-Giving Dialogue Developed to Support Older Adults in Learning to Live with Long-Term Pain: A Method and a Study Design

Catharina Gillsjö University of Rhode Island, cgillsjo@uri.edu

M. Berglund

Creative Commons License

Creative Commons License

This work is licensed under a Creative Commons Attribution 4.0 License.

Follow this and additional works at: https://digitalcommons.uri.edu/nursing facpubs

#### Citation/Publisher Attribution

Gillsjö C, Berglund M (2014) Reflective STRENGTH-Giving Dialogue Developed to Support Older Adults in Learning to Live with Long- Term Pain: A Method and a Study Design. J Gerontol Geriatr Res 3:187. doi:10.4172/2167-7182.1000187 Available at: http://dx.doi.org/10.4172/2167-7182.1000187

This Article is brought to you for free and open access by the College of Nursing at DigitalCommons@URI. It has been accepted for inclusion in College of Nursing Faculty Publications by an authorized administrator of DigitalCommons@URI. For more information, please contact digitalcommons@etal.uri.edu.



Research Article Open Access

# Reflective STRENGTH-Giving Dialogue Developed to Support Older Adults in Learning to Live with Long-Term Pain: A Method and a Study Design

Gillsjö C1,2\*and Berglund M1

<sup>1</sup>School of Health and Education, University of Skövde, Sweden

<sup>2</sup>College of Nursing, University of Rhode Island, USA

\*Corresponding author: Catharina Gillsjö, School of Health and Education, University of Skövde, Box 408, SE 541 28 Skövde, Sweden, Tel: +46500448000; E-mail: catharina.gillsjo@his.se

Rec date: Oct 31, 2014; Acc date: Dec 01, 2014; Pub date: Dec 03, 2014

Copyright: © 2014 Gillsjö C, et al. This is an open-access article distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.

#### **Abstract**

**Background:** Long-term musculoskeletal pain is a major health problem that significantly impacts quality of life among older adults. Many lack professional guidance and must learn on their own to live with pain. This calls for a holistic method that addresses older adults' needs in their situations. The developed method has its foundation in the didactic model: "The challenge – to take control of one's life with long-term illness.

**Aim:** The aim was to describe the method, Reflective STRENGTH-Giving Dialogue, and present a study design where the method is learned and used by health care providers to support older adults in learning to live their lives with long-term pain at home in a way that promotes health, well-being, meaning and strength in life.

**Methods:** The study design consists of an educational program including continuous supervision to health care providers during the accomplishment of dialogues with community dwelling older adults. The key dimensions in Reflective STRENGTH-Giving Dialogue are: **Situation** - Confront and ascertain the facticity in the current situation; **Transition** from "one to I" and Take charge in the situation; **Reflect** upon possibilities and choices; **ENgagement** in fulfilling small and large life projects that gives joy and meaning in life; **Get** inner strength and courage; **Tactful** and challenging approach and **Holistic** perspective. Data will be collected through interviews and questionnaires. Qualitative and quantitative methods (NRS, BPI-SF, GDS, KASAM, MSQ) will be used for analysis. A control-group will be enrolled.

**Discussion and Relevance of Study:** STRENGTH can be used to secure and enhance the quality of personcentered care. The method for dialogues can be a way to holistically and individually guide and support older adults in finding ways to live a meaningful life despite pain and to fulfill their desire to remain at home as long as possible.

**Keywords:** Older adults; Long-term pain; Home health care providers; Learning; Reflective dialogue; Didactic method; Study design

#### Introduction

There are various and often complex health problems, difficulties and disabilities associated with aging. One major health problem that frequently accompanies old age is long-term pain [1-5], with a predominance of long-term musculoskeletal pain [1,2]. Prevalence rates as high as 60% have been reported among community dwelling older adults [6-14]. This type of pain is recognized as a main cause for disabilities among older adults that significantly impacts quality of life [15-18]. Despite the frequency of musculoskeletal pain and its impact on older adults' lives, researchers continue to report that this type of pain, like long-term pain in general, is frequently unrecognized, underreported, and inadequately treated among older adults [13,19-22]. Not infrequently, the combination of pain and comorbidities results in frailty that adds to the complexity of health care for older adults [23]. Thus, many older adults desire to remain in their homes as long as possible despite their health problems, which is consistent with prevailing directions in health care policies. They fear having to leave their homes which are integral to their lives and

intimately linked with their identity, integrity and way of living [5,24-28]. Previous studies show that older adults experience a lack of guidance and support in life [5,29]. In contrast to the predominance on management of pain in the existing literature, the overall orientation for older adults living with pain is not the management of the pain itself but finding ways to live despite the pain. However, they are often forced into learning to live with pain on their own. Despite difficulties, they search for joy, meaning in life, and strength to carry on with daily living [5,30,31]. There is a need for a holistic method that addresses and supports older adults' needs while complementing existing psychosocial interventions that focus on pain management [23].

#### Aim

The aim was to describe the method, Reflective STRENGTH-Giving Dialogue (STRENGTH), and to present a study design where the method is learned and used by health care providers to support older adults in learning to live their lives with long-term musculoskeletal pain at home in a way that promotes health, well-being, meaning and strength in life.

## Background

According to Keefe, Porter, Somers, Shelby and Wren [23] several psychosocial interventions have been tested primarily among adults but also with young older adults living with pain. Interventions oriented toward older adults (65+), however, are limited in the existing literature. Examples of psychosocial interventions include Cognitive behavior therapy (CBT) [32,33], Emotional disclosure [34] and Mindbody interventions (mindfulness-based) [35]. The use of CBT among older adults (65+) has not been fully explored and evaluated [23,36]. Research in regard to emotional disclosure indicates the close linkage between conceptualizations and management of long-term pain and the need to integrate emotion into CBT in relation to this health problem [34]. There is limited research in the area of Mind- body interventions which make it difficult to assess its value in relation to control of pain [23].

psychosocial Psychologists have traditionally delivered interventions, often in institutional settings, with growing evidence that these interventions can be useful for older adults suffering from pain [23]. This addresses the need to develop methods that can be used in the context of home by healthcare professionals such as nurses, physical therapists, occupational therapists, since these professionals are the primary contacts and providers of health care in older adults' homes. It is important to develop methods that are grounded in caring science. This would give the professionals an inter-professional core in the provision of health care. In caring science the subjective experience of health entails the sense of well-being and being able to carry out small and large projects that are important in life. It includes ability to balance rhythm, pleasure, courage, meaning and strength in life [37-39].

Psychosocial interventions to date most often have a focus on management of health problems per see rather than a holistic orientation on whole persons in their contexts of living. Based on older adults' needs [5,30,31], it is significant to develop and use methods in the provision of health care that are grounded in theory where human beings are seen as a whole in their situations. A lifeworld theory is useful to address this need [40-42]. In this theory a person is seen as a lived body [42]. The lived body is physical, mental  $\,$ and existential at the same time. According to Heidegger [41], a person's life achieves its meaning from knowing that life is finite. A person lives life as an active agent together with other people. The person is a provider and seeker of knowledge who wants to take care of, comprehend and understand life (a.a). When a person suffers from long-term illness the body is changed and thereby also the access to the world. Learning is an embodied process of understanding including thoughts, experiences and feelings [42]. Learning entails a change, which occurs with the help of reflection and dialogue [43]. The need of support and guidance in this life-long process of learning to live with long-term pain is a challenge that needs to be addressed in the provision of health care. Ekebergh [44-46] has argued the need for reflection among health care providers in the process of learning and in the development of health care. Care based on a life-world theoretical foundation is labelled life-world-led care [39]. This is care that is intrinsically and positively health focused in its broadest and most substantial sense.

In this study the experiences that older adults have from enduring long-term pain constitutes a possibility to deepen understanding and to develop new knowledge. The older adults' experiences of living with long-term musculoskeletal pain at home were addressed by Gillsjö [5,30,31]. There were various ways of dealing with daily life while enduring pain but there was one major commonality. The older adults felt that they had no other choice than to learn to live with pain on their own. They used trial and error in their effort to endure and learn to live with pain. Over time they learned that balancing activities, thoughts and emotions were necessary elements in daily life. The older adults acted as their own coaches and used tremendous amount of energy and inner resources to get through the day with a bearable level of pain. Their focus on things that gave meaning and strength in life could be understood through their desire to capture, enjoy and value moments of pleasure. They consciously tried to remain as independent as possible since they did not want to be a burden to family and others. Clearly, without doubt, these older adults were in need of guidance and support in their effort to learn to endure and live with the unpredictable and disruptive pain in daily life at home.

The findings by Gillsjö [5,30,31] can be integrated with the didactic model developed by Berglund [29,47,48] and deals with the challenges involved in taking charge of one's life in learning to live with longterm illness. The model is grounded in a life-world perspective with the emphasis on the human being's experience as the basis for caring and learning. Berglund [29,47,48] stated the need of guidance and that the process of learning to live with long-term illness involves both coping and conscious reflection in everyday life. Learning to live with long-term illness is a complex phenomenon since it is incorporated in life as a whole and is therefore difficult to delineate from life itself. The learning affects the whole person, the body, cognitive functions, emotions, practical matters and social life. Learning turning points [48] while living with long-term illness has its origin in philosophical texts [41,43] and empirical results [29]. These learning turning points constitute the basis for the didactic model: The challenge - to take control of one's life with long-term illness. The model contains four theses: (i) Confronting one's life situation and challenging to make a change; (ii) Positioning oneself at a distance when creating a new whole; (iii) Developing self-consciousness and taking responsibility, and (iiii) Making learning visible with the aim of providing development and balance in life. The overall aim with the didactic model was to increase the person's health and well-being through a reflective dialogue, to encourage and support the person to reflect and make conscious decisions that increase their sense of health and wellbeing. Learning to live with long-term illness creates possibilities. The confrontation with facticity results in knowledge and experience that contributes with insights in meanings and values in life. The learning facilitates changes and new priorities in life. The learning supports a greater understanding of oneself and others and the ability to take charge and steer one's life towards new goals [29].

The older adult's experience of learning to live with pain could be improved through guidance as they strive to continue daily living [5,30]. The new perspective on learning to live with long-term illness as suggested in the didactic model [29,48] requires health care that is holistic and individually tailored to meet the person's needs and not only oriented toward the health problem itself. There is a need to provide a health care that addresses the older adults desire to remain at home which also coincides with the prevailing political orientation. Clearly, it is a challenge for health care providers and society at large to preserve and promote health, well-being and overall quality in life for the increasing aging population with complex health problems and needs that most often are associated with long-term pain at home.

## The Method: Reflective STRENGTH-Giving Dialogues

Reflective STRENGTH-Giving (STRENGTH) (in Swedish: Reflekterande KRAFT-Givande Samtal) is developed based on knowledge from the dissertations of Gillsjö [5] and Berglund [29]. STRENGTH is grounded in the human being's subjective experience of health problems such as pain, existential anxiety, mental and physical illness in daily living. The method is illustrated in Figure 1:

#### Reflective STRENGTH-Giving Dialogue:

- S Situation: Confront and ascertain the facticity in the current situation
- T Transition from "one to I" and Take charge in the situation
- R Reflect upon possibilities and choices
- EN Engagement in fulfilling small and large life projects that gives joy and meaning in life
- G Get inner strength and courage
- T Tactful and challenging approach
- H Holistic perspective

Figure 1: Reflective STRENGTH-Giving Dialogue, key dimensions.

The core that intertwines and flows throughout the method STRENGTH is the content in the last two key dimensions: A tactful and challenging approach (T) and a holistic perspective (H). This is the reason why these parts are presented initially. The holistic perspective has a focus on the person's total situation in life and an orientation toward things that give meaning, joy, strength and courage in daily living. The relationship between the person and the health care provider is characterized by the provider's attentiveness, open mind, curiosity and sensitivity in the situation. The tactful and challenging approach is used by the health care provider with the aim to increase the person's awareness of possibilities and choices in life.

The next to be described is the content that constitutes the "S". The person's current situation becomes explicit in the dialogue when the person is asked to describe the current situation in life. The person's experience in the situation becomes further explored with a tactful use of challenging questions with the aim of supporting the process of reflection and deepening the understanding. The question to be asked is: "Would you describe your situation as you experience it today?" This is followed by questions that encompass feelings, thoughts, experiences, understandings, actions and consequences.

The "T" contains the transition that the person is undergoing in the process of carrying out dialogues with a health care provider. A tactful and challenging approach is used to support the transition from "one" to "I". In daily language the word "one" is often used when talking about oneself in an un-reflected way. The use of "I" can be understood as a more conscious and reflected way of talking about oneself. This is important, especially in situations where decisions are made that will influence the person's health and well-being. The health care provider can support this transition by asking; Who is addressed?, when the

person uses the word "one" instead of "I" in relation to decisions made that influence daily living. This will promote the sense of taking charge in the current situation in life.

The "R" contains the use of reflection which is an additional core in the dialogue to deepen the understanding of daily living with health problems. The reflection also addresses the person's potential choices, possibilities and willingness to make deliberate decisions that aim to take charge and direct life in a more conscious way. The reflection process is initiated, led and deepened by the tactful and challenging approach. The process is oriented toward reflection upon the situation in parts as well as a whole and includes experiences within the time frames: past, present and future. The reflection upon the past includes the person's understandings of experiences in relation to feelings, thoughts and actions in life such as guilt, shame, and what may have caused the current situation. The present is the current situation as described in "S". Reflection in relation to the future can include expected experiences with feelings as fear and hope. The reflection is supported by the health care provider's questions and deepened through follow up questions as described in "S".

The "EN" and "G" contain the achievement given through the dialogues and can therefore be viewed as the an outcome of the method STRENGTH. The focus on values and meaning in life in the dialogues raises the awareness of the significance to carry out small or large life projects that have the potential to give strength, meaning and joy in life. This focus also supports the person's sense of strength and courage in daily living which will have influence on health and wellbeing

### Study Design

This intervention will be conducted as a pilot study, among 20 community dwelling older adults living with long-term musculoskeletal pain at home in three communities during a period of six months. Reflective STRENGTH-Giving Dialogues (STRENGTH) will be carried out by 10 health care providers, (registered nurses, physiotherapists and occupational therapists), among older adults within home health care. The intervention consists of an educational program including continuous supervision to the health care providers as they carry out dialogues once a week with two older adults. Data will be collected through interviews and questionnaires before and after the intervention. A control-group of 20 older adults will also be enrolled in the study. These participants will respond to the same questionnaires within the same time frame as in the study. Aging and living with long-term pain is associated with a successive decline in the experience of health and well-being. The use of control-group will be a way to compare if this expected decline is prolonged in the group where the dialogues are used. The science approach in the study is the Reflective Lifeworld Research approach (RLR) that is an approach grounded in lifeworld theory [41,42,49]. Dahlberg, Dahlberg and Nyström [50] developed a research approach, which is based on Giorgi's [51] phenomenological approach. The overall aim of the reflective lifeworld approach is to describe and clarify lived experiences in a way that increases a person's knowledge and understanding of her existence and experiences. The fundamental principle for this approach is openness and sensitiveness to phenomena of study.

## **Participants**

The inclusion criteria for the community dwelling older adults will be aged 65 or above and for at least six months, have lived with longterm (persistent or regularly recurring) musculoskeletal pain at home and receive community based health care. They also have to be able to understand and answer questions as well as be willing to participate in the study. The inclusion criteria for the health care providers (registered nurses, physiotherapists or occupational therapists) will be at least 3 year experience of provision of health care to the chosen population.

The head of the unit in community based care will identify and ask health care providers that meet the inclusion criteria if they are willing to participate in the study. Health care providers who have consented to participate in the study will identify older adults who meet the inclusion criteria, give them an informational letter, and ask if they are willing to participate. After consent is given each potential participant will be contacted by phone by the researcher and a time will be set for the interview and responding to questionnares.

## **Education and Supervision**

The health care providers will participate in an educational program consisting of two days education and training, followed by continous supervision and a final one-day seminar for evaluating the project. The educational program will encompass lectures, literature studies, seminars and practice within the following content areas: a) the older adults' conceptions of home and experiences of living with long-term musculoskeletal pain at home, b) the challenge to learn to live with long-term health problems, c) lifeworld-led care in theory and praxis, d) reflection and supervision to support the process of learning, e) the didactic model: The challenge taking charge of one's life and f) the method: Reflective STRENGTH-Giving Dialogues with an emphasis on physical, psychological and existential aspects [5,27,29-31,44,46-48,52-55]. The focal point in the education is to enhance the health care providers knowledge and skills to independently use the method STRENGTH. The aim is to holistically and individually strengthen and support the older adults' in their situation and to strengthen their ability to deal with daily living, in a way that enhances their sense of meaning, health and well-being in life. The health care providers will carry out dialogues once a week with two older adults during a period of 16 weeks. A handout will be developed to guide and support the health care providers in the dialogues. Other tools to be used in the dialogues are pictures and a set of documents.

The two-day education will be followed by continuous supervision in smaller groups every fourth week (four times in total) to support the health care provider in their accomplishment of the dialogues. The supervision will be held by two supervisors with experience of supervision and educated in the method. During the sessions of supervision the health care providers' feelings and experiences from the encounters with persons in their situations will become more explicit. The days of education and the sessions with supervision starts and ends with talking turns to invite the health care providers to participate actively and express their reflection upon their expectations and experiences. Talking turns will be used in the education and supervision to clarify what has been learned and how to proceed in the dialogues. In the talking turns, each health care provider will be asked, one after one, to articulate feelings and thoughts during carrying out the dialogues. Each session of education and supervision will end with the question: What do you carry with you from the session today?

#### **Data Collection**

#### **Oualitative interviews**

Qualitative interviews will be conducted individually with the older adults before and after the intervention. Qualitative interviews will also be carried out with the health care providers before and after the intervention. The interviews will be audio-recorded and transcribed verbatim. Dahlberg, Dahlberg and Nyström [50] describe qualitative interviews as dialogues where the informants' reflect upon their own experiences through openness and flexibility. The reflective process in the interview before the intervention is initialized by the question "Would you please describe your life with long-term pain?" for the older adults and "Would you please describe how it is to care for older adults with long-term pain?" for the health care provider. The answers on these questions will lead to new thoughts and follow-up questions to capture the participant's whole situation. The questions will be used to direct the attention toward the phenomenon of study and to enhance the understanding of its meanings. Examples of question areas to the older adults are as follows: daily living, health situation, sense of pain, well-being, thoughts and feelings, possibilities, choices, joy, meaning and strength in life and thoughts about the future. The inteviews after the intervention will have a focus on the older adult's experience of Reflective STRENGTH-Giving Dialogues, the current health situation (pain, well-being, other health problems), and if and how the dialogues may have influenced their situation. The final interview with the health care providers will be oriented toward their experience of carrying out Reflective STRENGTH-Giving Dialogues, the education and supervision.

#### Reflective narratives

To follow the process and the content in the dialogues the health care provider will write a reflective narrative in close connection to each dialogue This will be sent to the researchers and constitute the basis for one part in the sessions of continous supervision. In the oneday seminar the partcipants will be asked to write a narrative where they reflect upon and summarize their learning process during the education and in the accomplishment of the method STRENGTH. This narrative will also include their reflection upon changes that the older adults' might have undergone.

#### Reflective summaries in education and supervision

Audio-recording will be used as a start and in the end of each day of education in the talking turns where the health care providers' will express their reflection in relation to the education, supervision sessions and STRENGTH. These reflective talking turns will be audiorecorded and transcribed verbatim.

#### **Instruments**

The questionnaires Brief Pain Inventory-Short Form, Geriatric Depression Scale-20, and KASAM-13 will be used before and after the intervention at start and endpoint in the study among the older adults. The older adult will also evaluate their sense of pain and wellbeing on a numerical scale in relation to each dialogue. The questionnaire Moral Sensitivity (MSQ) will be used among health care providers to collect quantitative data in the beginning and end of the study. In addition, each older adult will evaluate their sense of pain and wellbeing on a numerical scale.

## Numerical measurment of health and well-being

In the beginning and in the end of each dialogue, each older adult will be asked to evaluate their sense of pain and wellbeing on a numerical scale (NRS) ranging from 0 to 10, where 0 corresponds to no pain and 10 corresponds to worst imaginable pain.

#### **Brief Pain Inventory-Short Form (BPI - SF)**

The BPI-SF is a self-assessment instrument originally developed to assess three dimensions of pain in cancer patients, i.e. sensory, emotional and cognitive. The long version of the instrument contains 23 items [56]. The nine item short version (BPI-SF) has been translated into Swedish [57] and has been tested for reliability and validity [58,59]. BPI-SF assess the history and characteristics of the pain, location, cause, influence on daily living and evaluation of current treatment. The BPI-SF is also equipped with a Visual analogue scale (VAS). The VAS is a horizontal or vertical nongraded 100-mm line, where 0 corresponds to "no pain" and 100 corresponds to "worst imaginable pain". The individual marks the appropriate point on the scale [60]. The instrument is suitable for assessing pain [61-64] and most individuals have no difficulty using it.

#### Sense of Coherence - 13 (SOC-13)

The SOC-13 questions measure the individual's overall ability to manage difficult situations (coping strategies) [65,66]. The SOC short version scale consists of 13 items on a 7-point Likert-scale, ranging from "very often" to "very seldom or never." The SOC scale evaluates perceived comprehensibility (5 items), manageability (4 items) and meaningfulness (4 items). The minimum number of points that can be assigned to any one question is 13, and the maximum number is 91. A higher score represents a stronger sense of coherence. SOC-13 has been tested for validity and reliability in a number of studies, and has been translated into Swedish [65,67].

## **Geriatric Depression Scale -20 (GDS-20)**

The GDS was developed as a screening instrument in a clinical setting to facilitate assessment of depression in older adults, 30 items [68]. The most common version used is GDS 15 item short form which was developed by Sheikh and Yesavage [69]. It is a self-rating scale but is recommended by the developers to be administered orally by an interviewer based on the notion that cognitive problems can affect the accuracy of self-reported problems. The GDS has a dichotomous Yes /No response choice for each item with a time frame of feelings the last week. Scores between five and nine indicate mild depression and a score of ten or more indicate moderate to severe depression. The GDS has been found to have high sensitive and specify in diagnosing depression [70]. The 15 item GDS has been modified by Gottfries, Noltorp, Nörgaard, Holmén and Högstedt [71] and extended with 5 items related to sleeping habits, anxiety, pain and worries about illness in daily living. A score 5 and below indicate that depression is improbable and a score 6 and above indicate that depression can be suspected.

#### Moral Sensitivity Questionnaire (MSQ)

The revised MSQ will be used in order to assess the concepts moral burden, moral strength and moral responsibility among the health care providers [71,72]. The original MSQ contained 30 items and was developed in psychiatric health care [73] but has been modified to be used in other clinical settings. The current MSQ contains 9 items with scales ranging from "Total disagreement" (1) to "Total agreement" (6) to assess the three concepts. Lützén, Blom, Ewalds-Kvist and Winch [74] refer to moral sensitivity defined as an "understanding of patients' vulnerable situation as well as an awareness of the moral implications of decisions that are made on their behalf" (p.216). The definition supports the idea that moral sensitivity is a process that encompasses knowledge and skills related to the concepts, cognitive abilities, feelings, emotions, and interpersonal interactions.

## **Analysis of Data**

The qualitative data will be analysed with a qualitative method found appropriate for the collected data. Methods that will be used are phenomenology [50] to understand the essence and meanings of a phenomena and hermeneutics [43,50,75] to gain a deeper understanding of the pattern of meanings of a phenomena through interpretation. Phenomenography [76,77] will be used to describe variations in how a phenomenon is experienced. Additionally content analysis will be used to describe the obvious and underlying meanings in relation to similarities and differences in an experience [78].

The analysis of the initial interviews will be focusing on the older adults' experiences of living with long-term musculoskeletal pain at home and the health care providers' experiences related to provision of health care for older adults with this type of pain. The focus in the analysis of the interviews carried out after the intervention will be on the older adults' and health care providers' experiences of the method STRENGTH. This analysis will also be oriented towards revealing changes in the older adults' experiences of health and well-being. Data collected in interviews, reflective narratives and audio-recordings from education and supervision will be analysed as a whole with a focus on the health care providers' experiences of the effect of the education, supervision and dialogues on their own provision of health care.

Data derived from instrumets will be analysed using descriptive statistics. Mann-Whitney U-test will be applied to determine differences between groups and time-points e.g before or after the intervention. ANOVA with repeated measurements will be used to test for differences in the older adults' experiences of pain, depression, well-being as reported over time in the instruments. Spearman rank correlations will be used to identify and calculate relations between variables in the instruments e.g. pain and well-being. The statistical analyses of data will be completed by use of SPSS 22.0 for Windows (IBM Corporation).

### **Ethical Issues**

This study follows the principles outlined in the Declaration of Helsinki [78]. The study has been approved by the Regional Ethical Review Board in Gothenburg [814-13]. The heads of social welfare services in three communites have granted their participation in the study. The participants will be informed, orally and in writing and asked to give their informed consent to participate. They will also be informed that they can interrupt their participation in the study at any time without explanation or consequences. No negative side-effects are exptected. However, an ethical consideration can be argued in regard to ending the dialogues in the study, which might lead to a feeling of loneliness among the older adults. Therefore, all the included older adults will be informed at the end of the study about their possibility to contact the home health care providers for guidance if needed. Another ethical consideration can be a potential sense of burden for the health care provider to carry out the method STRENGTH. This have been considered in the development of the method and continous supervision has been incorporated. Furthermore, will the researchers encourage the health care providers to contact them if needed.

## Discussion and Relevance of Study

This intervention study addresses older adults' lack of support and guidance in their learning to live with long-term musculoskeletal pain at home. The close alignment of home with the older adults' identity, integrity and way of living requires an increased sensitivity in addressing older adults' needs in their context of living [5,27,52].

This method and study design has a unique interprofessional profile with the inclusion of various professionals involved in the provision of health care in the older adult's home. This coincides with the need of interprofessional interventions to support older adults as requested by Keefe, Porter, Somers, Shelby and Wren [23]. The method Reflective STRENGTH-Giving Dialogues can be used as a common tool in the provision of health care for the purpose of securing and enhancing the quality of person-centered care in the given context. The method will be used as a means to create life-affirming conditions to promote sense of health and well-being among older adults living with long-term musculoskeletal pain at home. The focus on joy and meaning in the dialogues have the potential to give strength and courage to carry on in daily life. The dialogues also have the potential to be a way to holistically and individually guide and support older adults in their context and way of living with health problems such as pain. Sensitivity and understanding for things that bring joy and give strength and meaning in the older adult's life help to address the older adult's experience and needs while learning to endure pain in daily living. This comprehensive innovation could alleviate severe suffering, as it entails enduring and learning to live with long-term pain as well as support older adults in their need to take charge and find ways to live a meaningful life. These potential positive outcomes would be the contribution from using this method in providing health care needs as adressed in earlier dissertations [5,29].

There are methodological considerations in this intervention design that relates to the number of participants and to older adults as a frail and vulnerable population. This is a pilot intervention design which explains the low number of participants. The quantitiave questionnaries are used to measure differences before and after intervention for each individual and between intervention group and control group. However, the use of both qualitative and quantitative methods in the collection of data is a strength in this study design. There are difficulties in matching the participants in the intervention group with the control group, but there will be an effort to match age, gender and level of care. The participants in the two groups will come from different communities in order to control for social interation between older adults and health care providers.

The complexity in research and provision of health care to older adults relates to the individual variations in the aging process in relation to chronological, biological, pshychological and social aging and the comorbidites in various combinations that often accompany long-term pain. Keefe, Porter, Somers, Shelby and Wren [23] highlight that biological (e.g. osteoarthrithis, chronic heartfailure), psychological (e.g. depression, anxiety), social (health care environment, social isolation, socio-economic status) circumstances such as an unwillingness to report pain and fear of side effects influence the experience of pain and might complicate the pain management. The complexity in the provision of health care to older adults call for a method that can be used with a focus on the person as a whole and not the health problem itself. The focus in this pilot intervention is the older adult's need for guidance and support to continue daily living despite pain. The method STRENGTH has the potential to be a tool that can be used by various professions in health care to promote the older adults's sense of health, wellbeing, meaning and strength in daily living. This could undergird the older adult's desire to remain at home through an enhanced sense of comfort and security at home, followed by a postponed need to move to an assisted living facility.

#### References

- Socialstyrelsen (2009) Folkhälsorapport 2009 [Public Health Report 2009]. Socialstyrelsen [National Board of Health and Welfare]: Stockholm.
- Fors S Lennartsson C, Lundberg O (2008) Health inequalities among older adults in Sweden 1991-2002. Eur J Public Health 18: 138-143.
- Maxwell CJ Dalby DM, Slater M, Patten SB, Hogan DB, et al. (2008) The prevalence and management of current daily pain among older home care clients.Pain 138: 208-216.
- Soldato M Liperoti R, Landi F, Finne-Sovery H, Carpenter I, et al. (2007) Non malignant daily pain and risk of disability among older adults in home care in Europe.Pain 129: 304-310.
- Gillsjö C (2012) Older adults' conceptions of home and experiences of living with long-term muscusloskeletal pain at home, in College of Nursing. University of Rhode Island, USA.
- Bergman S Herrström P, Högström K, Petersson IF, Svensson B, et al. (2001) Chronic musculoskeletal pain, prevalence rates, and sociodemographic associations in a Swedish population study.J Rheumatol 28: 1369-1377.
- Grimby C, Fastbom J, Forsell Y, Thorslund M, Claesson CB, et al. (1999) Musculoskeletal pain and analgesic therapy in a very old population. Arch Gerontol Geriatr 29: 29-43.
- Lansbury G1 (2000) Chronic pain management: a qualitative study of elderly people's preferred coping strategies and barriers to management.Disabil Rehabil 22: 2-14.
- Leveille SG Zhang Y, McMullen W, Kelly-Hayes M, Felson DT (2005) Sex differences in musculoskeletal pain in older adults. Pain 116: 332-338.
- Woo J, Leung J, Lau E (2009) Prevalence and correlates of musculoskeletal pain in Chinese elderly and the impact on 4-year physical function and quality of life. Public Health 123: 549-556.
- Taylor W1 (2005) Musculoskeletal pain in the adult New Zealand population: prevalence and impact.N Z Med J 118: U1629.
- Bressler HB Keyes WJ, Rochon PA, Badley E (1999) The prevalence of low back pain in the elderly. A systematic review of the literature.Spine (Phila Pa 1976) 24: 1813-1819.
- Podichetty VK Mazanec DJ, Biscup RS (2003) Chronic non-malignant musculoskeletal pain in older adults: clinical issues and opioid intervention.Postgrad Med J 79: 627-633.
- Leveille SG Jones RN, Kiely DK, Hausdorff JM, Shmerling RH, et al. (2009) Chronic musculoskeletal pain and the occurrence of falls in an older population.JAMA 302: 2214-2221.
- Buchman AS Shah RC, Leurgans SE, Boyle PA, Wilson RS, et al. (2010) Musculoskeletal pain and incident disability in community-dwelling older adults. Arthritis Care Res (Hoboken) 62: 1287-1293.

- Falsarella GR Coimbra IB, Neri AL, Barcelos CC, Costallat LT, et al. (2012) Impact of rheumatic diseases and chronic joint symptoms on quality of life in the elderly. Arch Gerontol Geriatr 54: e77-82.
- Shah RC Buchman AS, Boyle PA, Leurgans SE, Wilson RS, et al. (2011) Musculoskeletal pain is associated with incident mobility disability in community-dwelling elders. J Gerontol A Biol Sci Med Sci 66: 82-88.
- Weathers E Creedon R (2011) The impact of osteoarthritis on psychological wellbeing.Br J Nurs 20: 243-246.
- Barber JB Gibson SJ (2009) Treatment of chronic non-malignant pain in the elderly: safety considerations. Drug Saf 32: 457-474.
- Brown ST Kirkpatrick MK, Swanson MS, McKenzie IL (2011) Pain 20. experience of the elderly. Pain Manag Nurs 12: 190-196.
- Tai-Seale M Bolin J, Bao X, Street R (2011) Management of chronic pain among older patients: inside primary care in the US.Eur J Pain 15: 1087.
- Weiner DK, Herr K, Rudy TE (2002) Persistent pain in older adults: An interdisciplinary guide for treatment. New York: Springer.
- Keefe FJ Porter L, Somers T, Shelby R, Wren AV (2013) Psychosocial interventions for managing pain in older adults: outcomes and clinical implications.Br J Anaesth 111: 89-94.
- Fänge A Ivanoff SD (2009) The home is the hub of health in very old age: Findings from the ENABLE-AGE Project.Arch Gerontol Geriatr 48: 340-345.
- Williams A1 (2002) Changing geographies of care: employing the 25. concept of therapeutic landscapes as a framework in examining home space.Soc Sci Med 55: 141-154.
- Williams AM1 (2004) Shaping the practice of home care: critical case studies of the significance of the meaning of home.Int J Palliat Nurs 10: 333-342.
- Gillsjö C Schwartz-Barcott D (2011) A concept analysis of home and its meaning in the lives of three older adults. Int J Older People Nurs 6: 4-12.
- Gillsjö C Schwartz-Barcott D, von Post I (2011) Home: the place the older adult cannot imagine living without.BMC Geriatr 11: 10.
- Berglund M (2011) Att ta rodret i sitt liv: Lärande utmaningar vid långvarig sjukdom [Taking charge of one's life: Challenges for learning in long-term illness], No 47/201 in Institutionen för hälso- och vårdvetenskap. Linnéuniversitet: Växjö.
- Gillsjö C, Schwartz-Barcott D, Bergh I (2013) Learning to Endure Long-Term Musculoskeletal Pain in Daily Life at Home: A Qualitative Interview Study of the Older Adult's Experience. J Gerontol Geriat Res
- 31. Gillsjö C, Schwartz-Barcott D, Bergh I, Dahlgren LO (2012) Older Adults' Ways of Dealing With Daily Life While Living With Long-Term Musculoskeletal Pain at Home. J Appl Gerontol 31(5): 685-705.
- Keefe FJ, Caldwell DS, Williams DA, Gil KM, Mitchell D, et al. (1990) Pain coping skills training in the management of osteoarthritic knee pain: A comparative study. Behavior Therapy 21(1): 49-62.
- 33. Keefe FJ, Caldwell DS, Williams DA, Gil KM, Mitchell D, et al. (1990) Pain coping skills training in the management of osteoarthritic knee pain-II: Follow-up results. Behavior Therapy 21(4): 435-447.
- 34. Lumley MA Cohen JL, Borszcz GS, Cano A, Radcliffe AM, et al. (2011) Pain and emotion: a biopsychosocial review of recent research.J Clin Psychol 67: 942-968.
- 35. Morone NE Greco CM, Weiner DK (2008) Mindfulness meditation for the treatment of chronic low back pain in older adults: a randomized controlled pilot study.Pain 134: 310-319.
- Andersson G Johansson C, Nordlander A, Asmundson GJ (2012) Chronic pain in older adults: a controlled pilot trial of a brief cognitivebehavioural group treatment.Behav Cogn Psychother 40: 239-244.
- Dahlberg K, Segesten K (2010) Hälsa och vårdande: i teori och praxis. [Health care: in theory and practice]. (1st edn.) Stockholm: Natur & Kultur
- Todres L Galvin K, Dahlberg K (2007) Lifeworld-led healthcare: revisiting a humanising philosophy that integrates emerging trends.Med Health Care Philos 10: 53-63.

- Dahlberg K Todres L, Galvin K (2009) Lifeworld-led healthcare is more than patient-led care: an existential view of well-being.Med Health Care Philos 12: 265-271.
- Husserl E (1907/1989) Fenomenologins idé. [The idea of phenomenology]. Göteborg: Daidalos.
- Heidegger M (2008) Being and time. New York: Harper Collins. 41.
- Merleau-Ponty M (2002) Phenomenology of Perception (2 nd edn.) Routledge Classics. Vol. Book. London: Routledge.
- Gadamer H-G (1989) Truth and method (2nd edn.) London: Sheed and 43.
- 44. Ekebergh M (2007) Lifeworld-based reflection and learning: a contribution to the reflective practice in nursing and nursing education. Reflective Practice 8(3): 331-343.
- Ekebergh M (2009) Developing a Didactic Method that Emphasizes Lifeworld as a basis for learning. Reflective Practice 10(1): 51-63.
- Ekebergh M (2009) Att lära sig vårda med stöd av handledning [Learn to care with support of supervision]. Lund: Studentlitteratur.
- Berglund M, Källerwald S (2012) The Movement to a New Understanding: A Life- World-Based Study about How People Learn to Live with Long-Term Illness. J Nurs Care 1: 25.
- Berglund MM1 (2014) Learning turning points--in life with long-term illness--visualized with the help of the life-world philosophy.Int J Qual Stud Health Well-being 9: 22842.
- Husserl E (1975) Experience and Judgment. Evanston, Illinois: Northwestern University Press.
- Dahlberg K, Dahlberg H, Nyström M (2008) Reflective lifeworld research (2 edn.) Lund: Studentlitteratur.
- Giorgi A (2009) The descriptive phenomenological method in psychology: A modified husserlian approach. Pittsburgh, PA: Duquesne University Press.
- Gillsjö C Schwartz-Barcott D, von Post I (2011) Home: the place the older adult cannot imagine living without.BMC Geriatr 11: 10.
- Berglund M (2012) Lärande vid långvarig sjukdom: utmaningar för patient och vårdare. [Learning at long-term illness: challenges for the patient and caregiver] (1st edn.) Malmö: Gleerups.
- Berglund M Sjögren R, Ekebergh M (2012) Reflect and learn together when two supervisors interact in the learning support process of nurse education.J Nurs Manag 20: 152-158.
- Cleeland CS Ryan KM (1994) Pain assessment: global use of the Brief Pain Inventory. Ann Acad Med Singapore 23: 129-138.
- Svensk sjuksköterskeförening, Spri (1999) Cancerrelaterad smärta. Riktlinjer för smärtbedömning, patientundervisning och komplementär smärtbehandling. [Cancer- related pain. Guidelines for pain assessment. patient education and complementary pain management] Omvårdnad 7:
- 57. Mendoza T Mayne T, Rublee D, Cleeland C (2006) Reliability and validity of a modified Brief Pain Inventory short form in patients with osteoarthritis.Eur J Pain 10: 353-361.
- Mendoza TR Chen C, Brugger A, Hubbard R, Snabes M, et al. (2004) The utility and validity of the modified brief pain inventory in a multiple-dose postoperative analgesic trial.Clin J Pain 20: 357-362.
- Huskisson E, ed. (1983) Visual Analogue Scales. Pain measurement and assesment, ed. R. Melzack. Raven: New York
- Choinière M Melzack R, Girard N, Rondeau J, Paquin MJ (1990) Comparisons between patients' and nurses' assessment of pain and medication efficacy in severe burn injuries. Pain 40: 143-152.
- Herr KA Spratt K, Mobily PR, Richardson G (2004) Pain intensity assessment in older adults: use of experimental pain to compare psychometric properties and usability of selected pain scales with younger adults.Clin J Pain 20: 207-219.
- Joyce CR, Zutshi DW, Hrubes V, Mason RM (1975) Comparison of fixed interval and visual analogue scales for rating chronic pain.Eur J Clin Pharmacol 8: 415-420.
- Jensen MP, Karoly P, Braver S (1986) The measurement of clinical pain intensity: a comparison of six methods. Pain 27: 117-126.

on: Gillsjö C, Berglund M (2014) Reflective STRENGTH-Giving Dialogue Developed to Support Older Adults in Learning to Live with Long-Term Pain: A Method and a Study Design. J Gerontol Geriatr Res 3: 1000187. doi:10.4172/2167-7182.1000187

Page 8 of 8

- Antonovsky A1 (1993) The structure and properties of the sense of coherence scale. Soc Sci Med 36: 725-733.
- 65. Antonowsky A (1999) Hälsans mysterium. Köping: Natur och Kultur.
- 66. Langius A, Björvell H (1993) Coping ability and functional status in a Swedish population sample.Scand J Caring Sci 7: 3-10.
- Sheikh JI Yesavage JA, Brooks JO 3rd, Friedman L, Gratzinger P, et al. (1991) Proposed factor structure of the Geriatric Depression Scale.Int Psychogeriatr 3: 23-28.
- Cruice M Worrall L, Hickson L (2011) Reporting on psychological wellbeing of older adults with chronic aphasia in the context of unaffected peers. Disabil Rehabil 33: 219-228.
- 69. Bergdahl E (2007) Depression among the very old, in Department of Community Medicine and Rehabilitation, Geriatric medicine & the Department of Clinical Sciences, Division of Psychiatry. Umeå University, Sweden.
- Gottfries CG, Noltorp S, Nörgaard N, Holmén A, Högstedt B (1997) Kvalitetssäkringsinstrument på vårdcentral: skala identifierar depression bland äldre [Instrument for quality assurance at health care center: scale identifying depression among older adults]. Lakartidningen 94(12): 1099-1102.

- Lützén K Dahlqvist V, Eriksson S, Norberg A (2006) Developing the concept of moral sensitivity in health care practice. Nurs Ethics 13: 187-196.
- 72. Lützén K Evertzon M, Nordin C (1997) Moral sensitivity in psychiatric practice.Nurs Ethics 4: 472-482.
- Lützén K Blom T, Ewalds-Kvist B, Winch S (2010) Moral stress, moral climate and moral sensitivity among psychiatric professionals. Nurs Ethics 17: 213-224.
- 74. Von Post I Eriksson K (1999) A hermeneutic textual analysis of suffering and caring in the peri-operative context. J Adv Nurs 30: 983-989.
- 75. Dahlgren LO, Fallsberg M (1991) Phenomenography as a qualitative approach in social pharmacy research. J Soc Admin Pharm 8: 150-156.
- Sjöström B Dahlgren LO (2002) Applying phenomenography in nursing research. J Adv Nurs 40: 339-345.
- Graneheim UH Lundman B (2004) Qualitative content analysis in nursing research: concepts, procedures and measures to achieve trustworthiness. Nurse Educ Today 24: 105-112.
- World Medical Association (2008) Declaration of Helsinki Ethical Principles for Medical Research Involving Human Subjects.