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IN NURSING CARE FOR
OLDER PEOPLE AND THEIR FAMILIES

Decibels Intervention

An intervention approach based on the meanings of vocal behaviours of older people living with a neurocognitive disorder

Second Edition

MANUAL FOR FAMILY AND FORMAL CAREGIVERS

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Notes
In this manual, the feminine is used for both genders and only to facilitate reading.

All references to neurocognitive disorders also include Alzheimer's, vascular, mixed, frontotemporal, and Lewy body disease.

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Table of Contents

Table of Figures

Introduction

In long-term care facilities (LTCF), most residents have major neurocognitive disorders, for example, Alzheimer's, vascular, mixed, frontotemporal or Lewy body disease. Among these older people, up to 60% of them manifest vocal behaviours.

These vocal behaviours can indicate an ill-being in the older people who manifest them. They also have many consequences for the person with this type of behaviour, such as social isolation, overmedication and increased anxiety. These behaviours also affect other people in the environment (e.g. other residents, family or formal caregivers).

Concerned by this situation and wishing to increase the well-being of older people living with Alzheimer's disease, our research team has developed an intervention to help formal and family caregivers of older people manifesting vocal behaviours. This intervention took the form of an approach based on the meanings of vocal behaviours. A memory aid tool presenting the various elements of this approach is available in the toolbox at the end of this manual (Tool 1).

This manual presents our intervention approach, which is divided as follows. First, it defines the key terms used in the approach to ensure readers' understanding. Second, it presents the principles underlying the approach and how to implement this approach. Finally, each step of the approach is explained. Various tools that could be useful in carrying out this approach are presented in the appendix.

Some definitions

Let us start by defining the key terms used in the intervention approach.

- ***Vocal behaviours**:* Behaviours heard by others that do not seem appropriate. They can take various forms, such as repeating words or sentences, moaning, singing or whistling. The intensity (loud or not), frequency (often or a few times per day) and duration (a few minutes or many hours) of vocal behaviours vary.

- ***Intervention approach*** (also called *Decibels Intervention*): A way of acting consisting of principles and a series of steps to increase the well-being of the older person, her family and formal caregivers.

- ***Family caregiver**:* A person who has an emotional and social relationship with the older person (e.g. a family member or friend).

- ***Meanings of vocal behaviours**:* What the behaviours mean or express. For example, vocal behaviours can express a need or pain.

- ***Formal caregiver**:* A registered nurse (RN), a licenced practical nurse (LPN), a nurses' aide or another health professional (e.g. recreational therapist, social worker, physician) involved in the older person's care.

- ***Neurocognitive disorder***: Physical changes in the brain that cause memory, concentration, problem-solving and language problems, among other issues. Examples of neurocognitive disorders are Alzheimer's, vascular, mixed, frontotemporal or Lewy body disease/dementia.

Key principles

Our intervention approach is based on five (5) key principles, which are the essential "ingredients" to be implemented.

A. Building a partnership between the older person, her family and formal caregivers

The intervention approach is based on commitment to a collaboration between the older person (as long as possible), her family caregiver and her formal caregivers. Both family and formal caregivers are encouraged to be actively engaged in sharing what they know. They are also encouraged to reflect, discuss, decide, plan and assess the various elements related to the intervention approach and to the vocal behaviours, and to do so together.

As a caregiver, you will be called to work regularly as a partner and co-decision-maker. The tools in the toolbox at the end of the manual (Tools 2, 3, and 4) have been designed to help you initiate and maintain such a partnership.

It is important to specify that this partnership between formal and family caregivers must go further than just the consultation or involvement of family caregivers. To help you see the difference, here are some definitions (also see Figure 1).

- *Consultation*: Formal caregivers inform family caregivers of the older person's behaviours and their interventions to try and reduce these behaviours. Family caregivers do not have access to the intervention plan.

- *Involvement*: Formal caregivers ask family caregivers' opinion about the meanings of and possible ways to reduce the vocal behaviours. Family caregivers may have access to the intervention plan, but do not participate in its application.

- ***Partnership***: Formal and family caregivers exchange information to better understand the vocal behaviours. Family caregivers help create, modify and actively implement the intervention plan. This is the basis of our intervention approach.

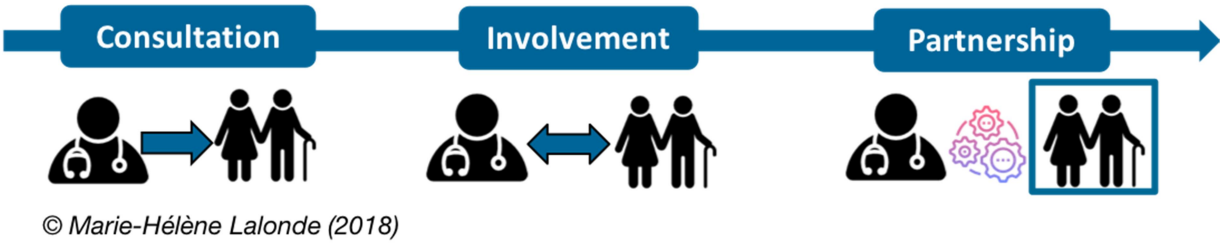


Figure 1. The continuum toward partnership

B. Identifying the meanings of vocal behaviours

Older people, like all human beings, behave out of their experience. The intervention approach is based on the meanings of vocal behaviours—i.e. what such behaviours express; for example, a need or pain—and their specificity to each older person. The intervention approach is based on the desire to understand, in partnership, the various meanings of the older person's vocal behaviours.

C. Using many interventions adjusted to the meanings of the vocal behaviours

Many interventions have to be combined to make actions effective and improve the well-being of the older person with vocal behaviours. The choice of these interventions has to be based on the meanings of vocal behaviours identified for this person.

D. Tailoring interventions to each older person

Every person is unique, as is the context in which she finds herself. Consequently, each intervention has to be adapted to the unique characteristics of the older person who had vocal behaviours and to her living environment. Given that the older person's experience changes over time and in different situations, these interventions have to be readjusted in response to the changing meanings of vocal behaviours.

E. Reflecting actively as a team

Family and formal caregivers have complementary strengths in finding both the meanings of vocal behaviours and new ideas for tailored interventions. For these strengths to come together, family and formal caregivers have to have frequent discussions, share knowledge and make decisions together. When partners reflect both individually and as a group on what works well and what needs to be improved, new ideas emerge that will make the approach even more effective in increasing the older person's well-being and in empowering family and formal caregivers.

Overview of the intervention approach

Figure 2 shows the five (5) principles underlying the intervention approach's six (6) steps. These latter interact and guide activity, and they are continuous, flexible and should be repeated. For example, some steps can occur at the same time, while others require a back- and-forth.

To foster partnership and carry out the various steps, family and formal caregivers should meet at least once a month. Tool 2 helps caregivers establish a partnership agreement to facilitate the organization of these meetings. A member of the care team should be appointed quickly as being responsible for establishing this partnership agreement and facilitating the organization of meetings. Here are some tips for organizing these meetings:

- Plan for the first meeting to be formal, structured and in a closed room
- Then, alternate formal meetings with informal meetings (at the nursing station, without a precise agenda)

Also, when using the intervention approach, remember these prerequisite attitudes:

1. *Vocal behaviours should not be considered an unavoidable behaviour in the older person who has a neurocognitive disorder;*

2. *An attitude of openness and curiosity should be adopted, as well as the wish to discover the meanings of the older person's vocal behaviours.*

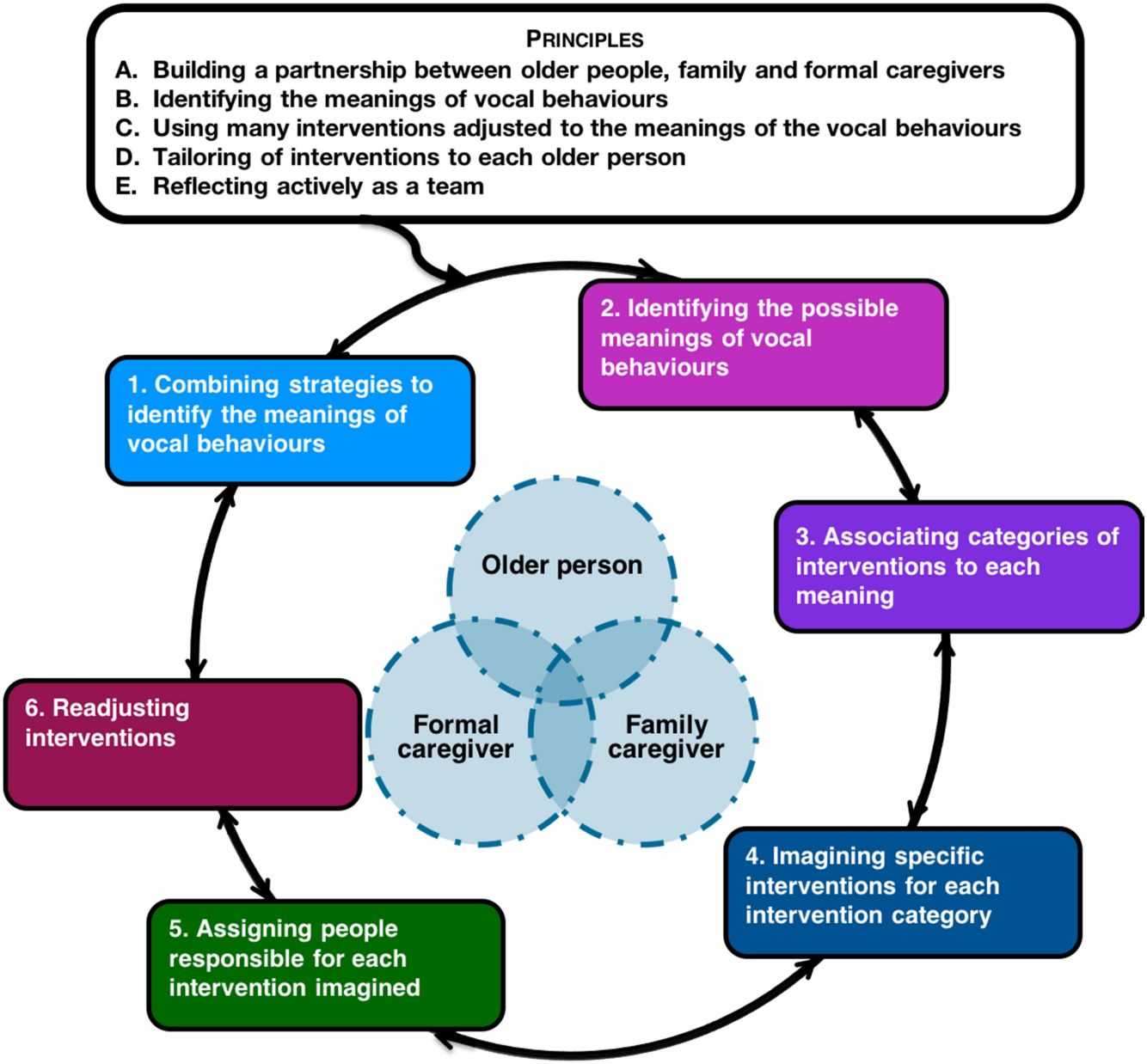


Figure 2. Intervention approach

Each of these 6 steps is explained in detail in the following sections, and clinical examples will illustrate each step. These examples are based on the fictional story of Mrs. Gruda, an older person, her formal caregivers and her daughter Anita. Box 1 introduces you to Mrs. Gruda.

Box 1. The older person

Hello! My name is Mrs. Gruda. I am 81 years old, and I was born in Poland. I have been living in this long-term care facility for a few years, and my daughter Anita comes to visit me every week. It makes me so happy when she comes to see me!

People don't understand why, but I scream many times a day. Most of the time, I scream "Help! Help! God, help me!" I repeat the same words, but I don't always scream for the same reasons. Sometimes I even scream in Polish because it is my mother tongue and it comes back to me so easily!

Often, when I scream, I do not feel comfortable or something is bothering me. I am bored and sometimes I even feel like I'm already dead. I am always very happy when someone comes to talk to me and I open my arms to them so they will understand that I am happy to welcome them. I am also very happy when my daughter comes to visit me. I don't always remember her name or even recognize that she is my daughter, but I don't forget that I know and love her. Her visits are very good for me because in those moments I feel less lonely and I have the chance to speak Polish with someone who knows me well. Sometimes, she tells me that I scream. I believe her, but I am surprised because I don't always realize I scream. It must be very disconcerting for her that I am not aware of it, but honestly I don't know why I do it.

Steps of the intervention approach

The intervention approach takes place continuously with the older person manifesting vocal behaviours (see Tool 1 for a memory aid of the approach's steps). During the first two months, formal and family caregivers should meet at least once a month. Thereafter, meeting frequency is determined by the partners' and the older person's needs, based on the partnership agreement (see Tool 2). The precise sequence of these meetings is described later. The toolbox contains a sample script of what to say to a family caregiver when you want to organize the first meeting (see Tool 3).

Step 1: Combining strategies to identify the meanings of vocal behaviours

In the first step of the intervention approach, various strategies are used in combination to identify the meanings of the older person's vocal behaviours so as to understand them better. Four categories of strategies should be combined (see Figure 3) and are shown below. We present a list of strategies for each category as examples to use, but feel free to add more if needed! It should be noted that the strategies are often interconnected between categories and should be used by several people at different moments in the day, evening and night, as well as over time.

Figure 3. Strategies to identify the meaning of vocal behaviours

Exploratory strategies

This category includes ways to explore, examine and assess with the older person the different reasons for her vocal behaviours and their triggers. Most of these strategies are based on direct interactions with the older person and they require a good knowledge of her personal history, habits, preferences and characteristics (psychological, social, physical). These strategies include:

- ***Asking the older person directly the reasons behind her vocal behaviours.*** For example: Are you in pain? Are you comfortable? Are you tired? Is it too noisy? You are screaming; is something bothering you? Are you bored? Do you need to use the toilet?

- ***Assessing the needs of the older person.*** For example, check if she is hungry, if she needs to use the toilet or to have her incontinence pad changed.

- ***Examining the older person to eliminate physical problems.*** For example, make sure her clothes are not uncomfortable or that she does not have skin irritation.

- ***Carefully observing.***
    - Her physical and social environment: noise (television, music), room temperature, light intensity, the presence of unusual people, etc.

    - Her behaviours and habits: non-verbal signs, activities of daily living, changes in sleep, characteristics of her vocal behaviours (type, intensity, duration), etc.

    - The behaviours of other residents around her (for example, communication between residents).

An observation grid for recording and organizing your observations of the older person's vocal behaviours is available in the toolbox (see Tool 5).

Deductive strategies

The strategies in this category are based on assumptions or ideas that have not yet been verified but that might explain the older person's vocal behaviours. These strategies use reasoning to try to explain the vocal behaviours and their triggers. For example, these strategies include:

- ***Comparing vocal behaviours of the older person*** with her usual behaviours and with those of other older people, so as to distinguish different types of

vocal behaviours and changes over time and across situations. For example, notice the difference between the vocal behaviours of an older person who whimpers “mmmm” when feeling sad and those of another person who repeats “hello, hello, hello” when she sees someone and wants them to approach.

- ***Eliminating possibilities*** by trial and error with a view to stopping vocal behaviours or increasing the older person’s well-being. This consists of trying things with the older person and checking if they have an effect. For example, giving a painkiller or applying a hot pad to check if vocal behaviours are caused by pain.

- ***Paying attention*** to the characteristics of vocal behaviours, the words used and the behaviours associated with them. For example, a sad face with vocal behaviours when family leaves after visiting, or high-pitch screams and banging when there’s pain.

- ***Being empathetic*** and putting yourself in the older person’s shoes to try to understand how she feels. For example, imagine the sadness or frustration of an older person who does not have much control over her environment or who feels like a thing.

Collaborative strategies

This category refers to the ways an older person’s family and formal caregivers discuss and brainstorm together to better understand the reasons behind her vocal behaviours and improve her well-being. Based on respect and trust, these strategies aim to recognize and optimize each partner’s strengths. For example, these strategies can include:

- ***Discussing amongst formal caregivers*** about the older person and her vocal behaviours and pooling their knowledge. If some caregivers are more experienced with this type of behaviour, they can help the rest of the team.

- ***Talking amongst family caregivers*** (i.e. within the family) about the older person’s vocal behaviours and thinking together about their possible reasons.

- ***Discussion between family and formal caregivers*** to encourage the sharing of unique knowledge about the older person and to welcome ideas.

Reflective strategies

This category includes strategies that examine the spontaneous thoughts that arise about the older person's vocal behaviours. Bringing a different perspective that may lead caregivers to understand the older person better, these strategies include:

- ***Thinking as a group*** and brainstorming about the older person's vocal behaviours to understand them better.

- ***Questioning***
  - The older person's context: For example, can you think of events that occur on the care unit and that seem to influence the vocal behaviours of the older person? Can you think of specific places where this person has more vocal behaviours?

  - Our observations of the older person: What comes to mind when you look her in the face during her vocal behaviours? Do you have any ideas why she has more vocal behaviours at specific times?

  - Our interactions with the older person: Do some of your actions have an impact on her vocal behaviours?

Be creative!

How else could you identify the meanings of an older person's vocal behaviours?

Box 2 introduces you to Mrs. Gruda's nurse and shows you how she carried out Step 1 of the intervention approach to increase Mrs. Gruda's well-being.

Box 2. Mrs. Gruda's nurse

*Mrs. Gruda manifests vocal behaviours many times a day. My co-workers and I know that her behaviours are not "normal" even if Mrs. Gruda does have Alzheimer's disease and that we can do things to improve her well-being (**prerequisite**).*

*First, I work with the rest of the care team. Discussing Mrs. Gruda's vocal behaviours with my co-workers gives me more information about her and allows me to see her behaviours from different angles (**collaborative strategies**). I understand her better! Mrs. Gruda's daughter, Anita, helps us a lot, too, since she is very involved and she really works with us. Her contribution is truly amazing during our meetings because she knows her mother so well! Thanks to her, we now know Mrs. Gruda better. For example, we learned that she was always very busy and involved with others (**importance of knowing the older person**). Her house was open to everyone and she loved to cook and entertain guests. Now, she's often very bored since she can no longer care for others. Anita thinks her mother may feel like she's in prison. This information was very useful in planning Mrs. Gruda's care. I never would have gotten there without her daughter's help (**collaborative strategies**).*

*I've also learned reasons why Mrs. Gruda manifests these vocal behaviours by questioning her directly! It seems normal, but often we forget that older people with Alzheimer's disease are still able to tell us what they're experiencing in their own way! I also try eliminating any physical problems to make sure she has no pain or discomfort, and I assess her needs (**exploration strategies**). Sometimes, when I can't figure out why she's screaming, I just try things and I observe how she reacts (**deductive strategies**). For example, one day I noticed that there was a lot of ambient noise and that it seemed to bother her because she started having vocal behaviours.*

*Sometimes I also try to put myself in her shoes to understand the reasons behind her vocal behaviours. I think that if I lived with people I didn't recognize, I would probably also be nervous, and I might even scream for help (**deductive strategies**)!*

Step 2: Identifying the possible meanings of vocal behaviours

The second step consists of organizing a team meeting that includes the older person's formal caregivers and at least one family caregiver. Its aim is to share the meanings of the vocal behaviours that have been identified and the strategies used to identify them. During this meeting, partners continue to identify the meanings of vocal behaviours and pinpoint them more accurately through group reflection and discussion using the following five groupings of meanings presented below (see Figure 4). We present a list of possible meanings in each grouping. These examples can help you identify the specific meanings of the older person's vocal behaviours, but you may also identify other meanings that are not on this list of examples.

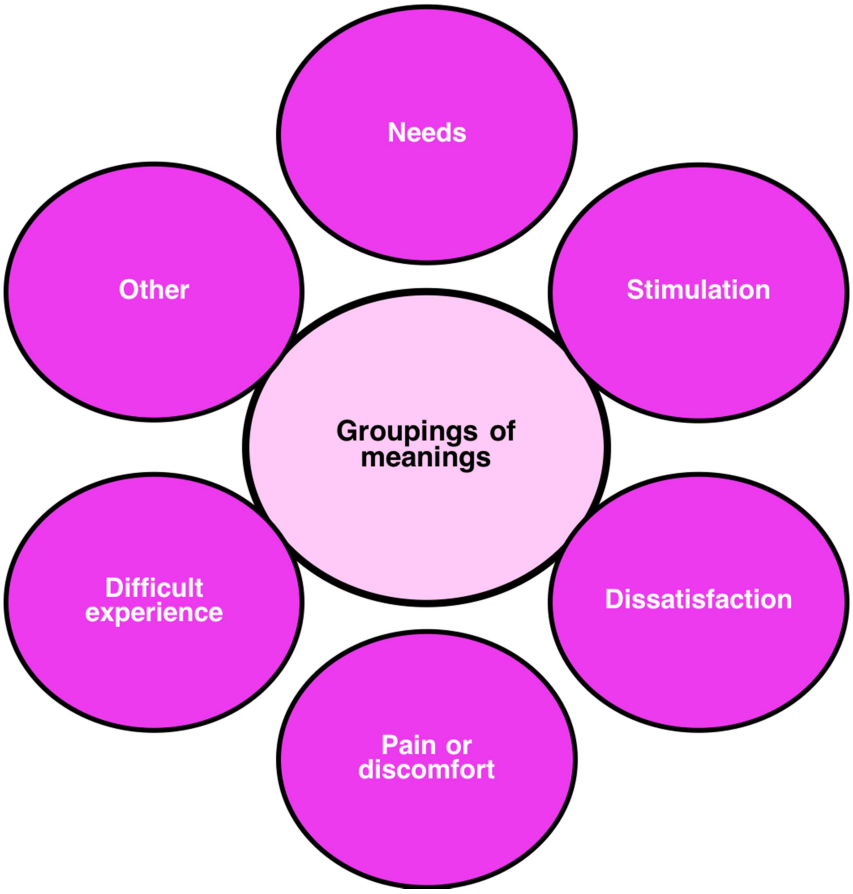


Figure 4. Groupings of meanings for vocal behaviours

It should be noted that Steps 3, 4 and 5 of the approach (to be described later) will also be performed during the first meeting. To facilitate a smooth first meeting, include as many people who are involved as possible and keep it as formal as possible. A memory aid for the approach (see Tool 1) and a note sheet to record joint decisions (see Tool 6) are available in the toolbox. You will also find an example of the note sheet, completed for Mrs. Gruda.

Needs

This grouping of meanings covers vocal behaviours that express needs, such as:

- *Physical needs:*
    - because she's tired
    - because she needs to use the toilet
    - because she wants to change positions
    - because she's thirsty or hungry
    - etc.
- *Social and emotional needs:*
    - because she's scared
    - because she feels lonely
    - because she's bored
    - because she wants to communicate or talk to someone
    - because she wants attention or affection
    - because she's angry
    - etc.

Stimulation

This grouping of meanings covers vocal behaviours when there is too much or not enough stimulation. For example:

- *Vocal behaviours can express overstimulation:*
    - because there is too much light
    - because there is too much noise in the hallway
    - because there are too many people around
    - etc.
- *Vocal behaviours can express understimulation:*
    - because there is not enough noise
    - because there are not enough activities
    - because she cannot see anyone around
    - etc.

Dissatisfaction

This grouping of meanings encompasses vocal behaviours that express dissatisfaction or disagreement with a specific situation or care, or with the organization of the environment. Here are examples of meanings for each of these elements:

- *Vocal behaviours can express dissatisfaction with a situation or care:*
    - because she does not understand the language
    - because she does not want to be changed or washed
    - because she is not part of the conversation
    - etc.
- *Vocal behaviours can express dissatisfaction with the organization of the environment:*
    - because the bedside table is too far
    - because the bedroom door is not closed
    - etc.

Discomfort or pain

This grouping of meanings covers vocal behaviours indicating pain or discomfort.

- *Vocal behaviours express pain or discomfort:*
    - because she was touched harshly
    - because she has unrelieved pain
    - etc.

Difficult experiences

This grouping of meanings covers vocal behaviours that express suffering and vulnerability in a situation. For example:

- *Vocal behaviours can express suffering:*
    - because she is reliving difficult memories from the past
    - because she feels she is being treated like an object
    - because she does not understand why she is living in a long-term care facility
    - because she does not want to live
    - etc.
- *Vocal behaviours can express vulnerability:*
    - because she does not have the ability to communicate otherwise
    - because she does not understand what is going on
    - because she is disoriented
    - etc.

Be creative!

What other meanings could vocal behaviours have?

Box 3 introduces you to Mrs. Gruda's daughter and lets her explain the meanings of her mother's vocal behaviours, based on Step 2.

Box 3. Mrs. Gruda's daughter

I was very surprised to realize that my mother expresses many things with her vocal behaviours! Working with formal caregivers and using different strategies, we found various meanings behind my mother's behaviours.

*We discovered that she has vocal behaviours when she feels tired or needs to use the toilet (**physical needs**). We also saw that she screams sometimes to get attention or because she misses me (**social needs**). Discussing with caregivers and combining several strategies to identify the meanings of her vocal behaviours, I realized she also has these behaviours when she feels nervous and anxious. Most often, she has vocal behaviours because she wants affection (**emotional needs**). Also, when I leave at the end of a visit, my mother may scream because she doesn't want me to leave. She was able to tell me that her current situation isn't a life (**difficult experience**).*

*Other times, my mother gets angry if she can't get what she wants or doesn't get it fast enough (**dissatisfaction**). In these cases, her vocal behaviours become louder and louder until she gets what she wants. She also gets angry when I talk to someone while she is next to me and I don't include her in the conversation. She lets us know her displeasure loud and clear (**dissatisfaction**)!*

*Also, my mother has vocal behaviours when there's a lot of noise in the hallway near her room, especially when there's too much back-and-forth by staff or medication carts (**stimulation**). I also know that my mother has osteoarthritis and it hurts. When we lift her, it's obvious that she's hurting, as she grimaces and screams (**pain**).*

Step 3: Associating categories of interventions to each meaning

The third step takes place in the meeting between the older person's formal and family caregivers. It consists of choosing the categories of interventions most appropriate to associate with each meaning identified in Step 2.

Specifically, each meaning of the vocal behaviours has to be considered, one at a time, and associated with one or several categories of interventions. Imagine that the meanings of vocal behaviours and the interventions are pieces of a puzzle that must be put together. This association process is essential if the older person's behaviours are to be changed optimally and her well-being improved.

It is important to resist our tendency to look too quickly for very specific interventions. Instead, associate each identified meaning to the categories of interventions. This will make sure you don't skip over good ideas for new interventions!

There are at least four categories of interventions that can be associated with the meanings of vocal behaviours (see Figure 5). These are described below, and specific examples for each category are presented in Step 4.

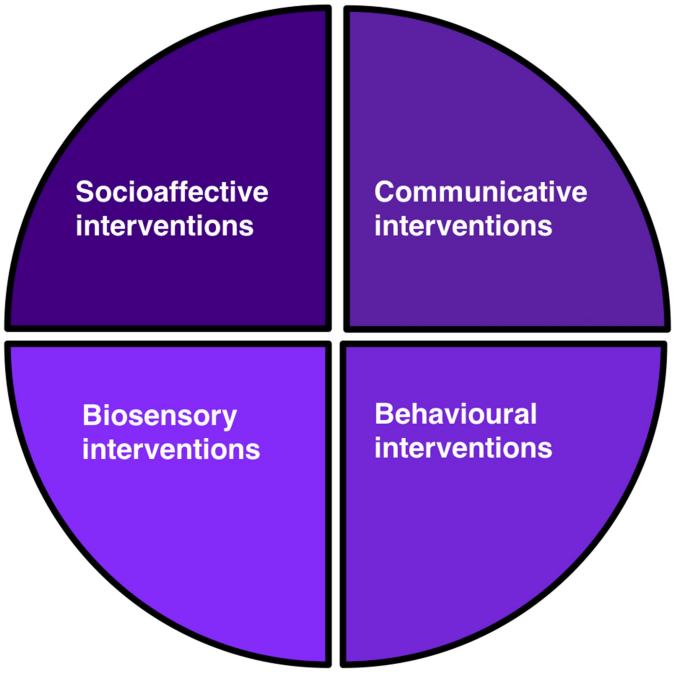


Figure 5. Categories of interventions

Socioaffective interventions

Interventions of this category encompass the older person's social relationships and emotions. They require patience, respect and sensitivity towards the older person with vocal behaviours.

Communicative interventions

This category includes interventions that address the different ways of communicating with an older person living with a neurocognitive disorder.

Behavioural interventions

Interventions in this category target different behaviours that can be adopted with the older person. It also involves the various activities to distract and entertain the older person.

Biosensory interventions

This category groups interventions aimed to meet the physical needs of the older person and to relieve her pain or discomfort. It also includes interventions that stimulate her different senses (taste, hearing, touch, smell and sight).

Be creative!

What other categories of interventions could be associated with the meanings of vocal behaviours?

Step 4: Imagining specific interventions for each intervention category

The fourth step is also carried out during the meeting between the older person's formal and family caregivers. This activity requires imagining, in partnership, several interventions for each category associated with the meanings of the older person's vocal behaviours (see Figure 6).

Specifically, each meaning associated with categories of interventions has to be considered one at a time, and partners have to reflect together on what has already been done, what more could be done and what could be done differently to reduce vocal behaviours and to increase the well-being of the older person. This activity requires caregivers to be creative and solicit different perspectives from partners (family caregivers and the various formal caregivers). The interventions imagined should be tailored to match the older person's unique characteristics. The use of a device or medication that restricts the older person's movements or behaviours (e.g. abdominal belt to maintain the older person seated in a chair or a medication to control anxiety or behaviours considered to be aggressive) should definitely be a last resort because of the adverse side effects associated with their use (e.g. death, falls, injuries, cardiac problems).

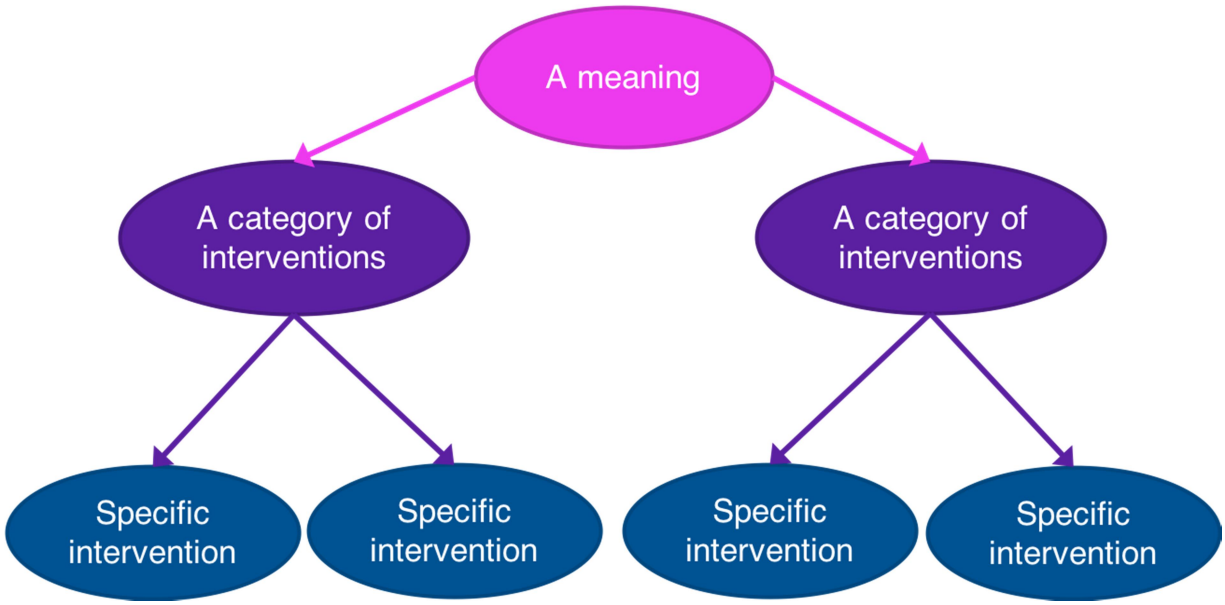


Figure 6. Identifying specific interventions

To help you think up interventions, specific examples for each category of interventions are presented below. But many other interventions can also be used!

Examples of socioaffective interventions

- *With other older persons:*
    - Set her up near another resident who has a calming effect
    - Get her to walk with another resident
    - Allow her to help other residents
    - Etc.

- *With formal caregivers:*
    - Give her attention and show her affection: hug her, take her hand, etc.
    - Allow her to show affection
    - Compliment her
    - Visit her frequently when she is in her room
    - Etc.
- *With family caregivers:*
    - Show her affection and allow her to show affection
    - Massage her hands
    - Organize a conversation on Skype™
    - Help her call her family
    - Simulate a presence by hanging pictures, playing a video recording of her family, having her hear the voice of a significant person, etc.
    - Etc.

Examples of communicative interventions

- *Talk to her:*
    - Using short sentences
    - With humour and laughter
    - By entering into her story instead of reorienting her (allow her to stay in her reality)
    - In her mother tongue
    - About a loved one
    - Etc.
- *Explain what you are doing:*
    - Name each of your actions
    - Explain the reasons of your actions step by step
    - Etc.

Examples of behavioural interventions

- *Distract her:*
    - Have her watch TV in her mother tongue
    - Allow her to do activities she enjoyed: having tea with guests, etc.
    - Get her to sing with other residents
    - Work with a recreologist/leisure technician/volunteer
    - Encourage her to pray
    - Etc.

- *Do something with her:*
    - Bring her outside
    - Give her a bath
    - Pamper her
    - Etc.
- *Allow her to control and participate in her care:*
    - Give her a choice between two articles of clothing
    - Follow her instructions during care, whenever possible
    - Give her a role in the care activity
    - Let her do things by herself: combing her hair by herself, etc.
    - Etc.

Examples of biosensory interventions

- *Respond to her physical needs:*
    - Change her incontinence pad
    - Offer her something to drink
    - Strike a balance between activities and rest
    - Etc.
- *Relieve her pain or discomfort:*
    - Give her painkillers
    - Give her a hot pad
    - Change her position
    - Etc.
- *Stimulate her senses:*
    - Have her listen to music
    - Use aromatherapy
    - Help her look at a photo album
    - Give her food she likes
    - Let her touch a pet
    - Etc.

Be creative!

What other interventions could be helpful with an older person who has vocal behaviours?

Step 5: Assigning people responsible for each intervention imagined

The fifth step is carried out in partnership during the meeting between the older person's family and formal caregivers. The goal is to identify the best people to implement the interventions that were thought up in Step 4 (see Figure 7).

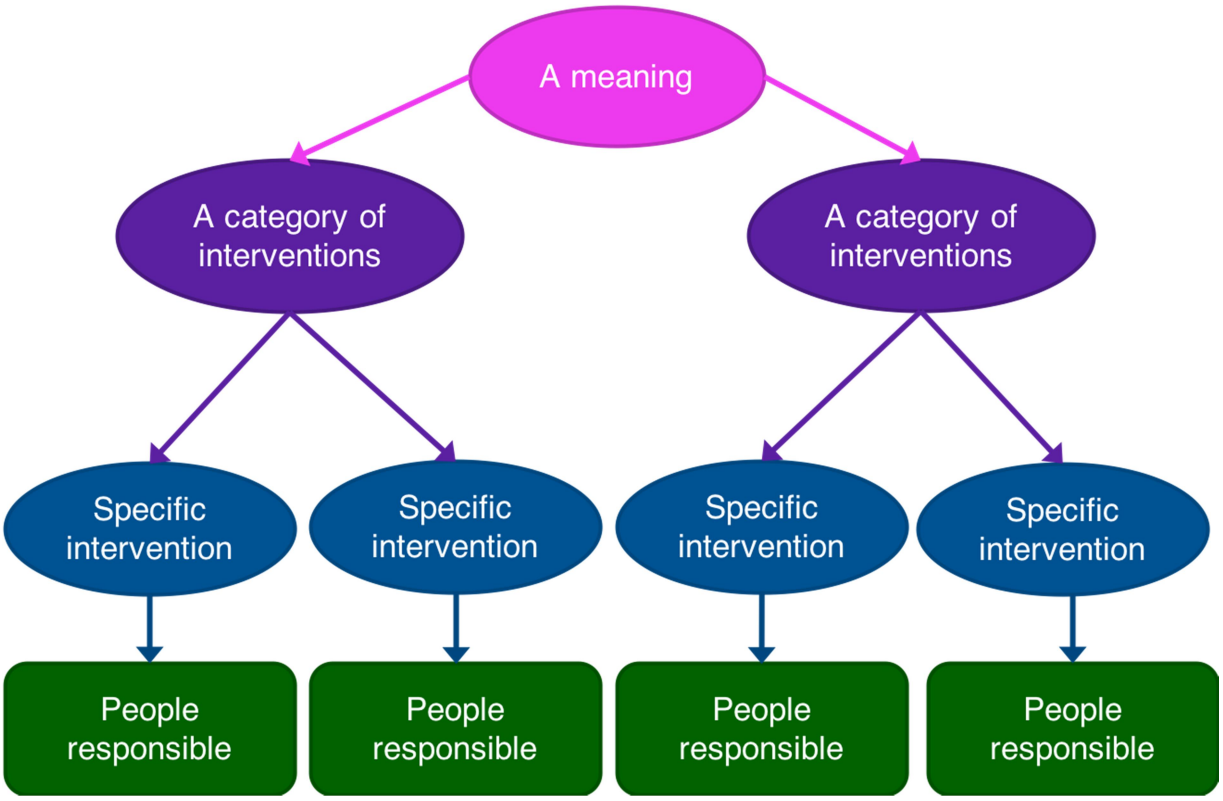


Figure 7. Links with people responsible

More specifically, several people can be assigned for implementing each of the interventions. They can be other older people, volunteers, housekeeping staff, various formal caregivers or family members who interact with the older person who has vocal behaviours. If some of the people being assigned are not present at the meeting, their agreement should be sought, and the principles of the approach should be explained to them.

In Box 4, Mrs. Gruda's nurse talks about Steps 3, 4 and 5 of the intervention approach.

Box 4. Steps 3, 4 and 5 according to Mrs. Gruda's nurse

*As a team, we spend a lot of time thinking about Mrs. Gruda's behaviour in order to identify the meanings of her vocal behaviours and **imagine several interventions** that might make her feel better. Whenever we identify an intervention together, we wonder who is best placed to implement it. Often, **several people are involved** to ensure maximum success!*

*For example, by talking with her daughter, we realized that Mrs. Gruda needs to receive attention when she's with formal caregivers or other older people, and that the lack of attention is one of the reasons behind her vocal behaviours. In the morning, when we're all very busy, we organize her so she's sitting with another resident who she likes a lot and who always takes her hand. She has fewer vocal behaviours during this time! Her daughter also takes advantage of her visits to show her affection (**socioaffective interventions**). I also realized that when I speak with another resident nearby I have to engage Mrs. Gruda in the conversation, otherwise she starts to manifest vocal behaviours. She wants to participate, too (**communicative interventions**)!*

*The formal caregivers who are most accustomed to Mrs. Gruda say it's very important for her to feel in control; otherwise, she'll start to manifest vocal behaviours. So, everyone tries to make her participate in her care as much as possible and give her choices to make her feel more in control (**behavioural interventions**). For example, we ask her "Do you want to wear your blue or your red dress today?"*

*We also try to respond quickly to Mrs. Gruda's physical needs because she expresses them loud and clear! If you don't react quickly enough to her liking, she will scream even louder! So, we've made it a habit of bringing Mrs. Gruda to use the toilet as soon as she finishes eating so she doesn't scream later. We also have noticed that she often has the munchies in the afternoon, so we bring her into the dining room and offer her an herbal tea and some cookies her daughter bakes her. She loves dipping her cookies in her herbal tea, and she does seem satisfied after that (**biosensory interventions**)!*

Step 6: Readjusting interventions

The sixth step is to organize follow-up meetings with the older person's formal and family caregivers to reassess the meanings that were identified for the vocal behaviours and to re-adjust the interventions according to their effectiveness. Specifically, a second follow-up meeting should be held no later than a month after the first meeting and a third should be held two months later. Thereafter, meetings can be held as frequently as partners feel the need for them. As advised earlier, you can alternate between formal and informal meetings (see Figure 8).

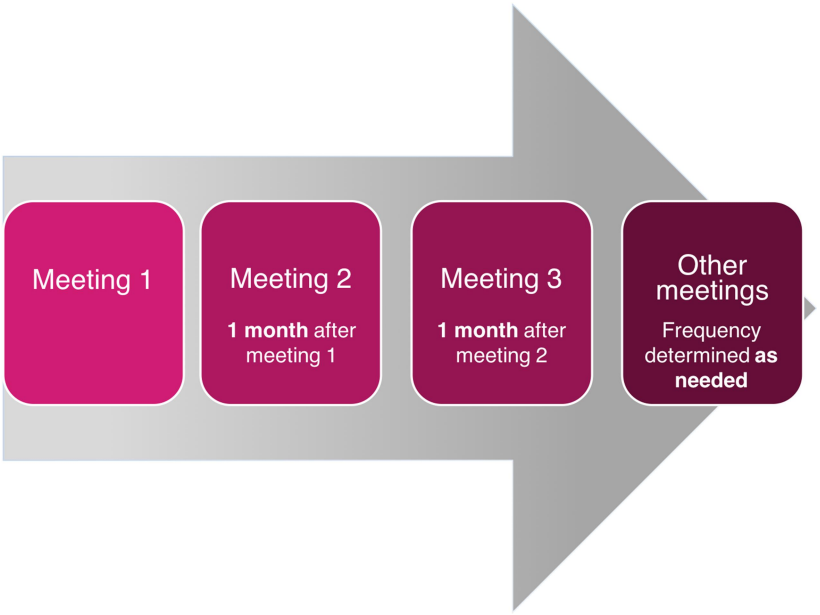


Figure 8. Frequency of mandatory meetings for readjusting the interventions

As mentioned earlier, an example of a script for organizing the first meeting with the family caregiver (see Tool 3), examples of questions to ensure the smooth running of meetings (see Tool 5) and a note sheet to record joint decisions (see Tool 6) are available in the toolbox. You will also find an example of the note sheet, completed for Mrs. Gruda.

During follow-up meetings, partners should work together to reflect on the following aspects of the approach:

Reflect on the meanings of vocal behaviours

- ***Reflect on the meanings of vocal behaviours*** *by repeating Steps 1 and 2 and trying to answer the following questions:*
  - Were the meanings identified appropriate?
  - Are meanings different now?
  - Are there new possible meanings?

Reflect on interventions

- ***Reflect on the interventions*** *by repeating Steps 3, 4 and 5 and answering the following questions:*
  - Were the imagined interventions applied? If not, why?
  - Do they work (intensity, frequency of vocal behaviours, well-being, reaction of people hearing the behaviours, etc.)?
  - Which ones are the most effective? The least effective?
  - Would new interventions associated with the meanings of vocal behaviours be more appropriate?

Reflect on the intervention approach

- ***Reflect on the intervention approach*** *itself by asking the following questions:*
  - Do formal and family caregivers feel able to intervene with the older person who has vocal behaviours?
  - How is the partnership? What are the strong points? What could be improved?

Be creative!

How could you facilitate the partnership between family and formal caregivers and, if needed, readjust the interventions effectively?

In Box 5, Mrs. Gruda's daughter Anita talks about the sixth step of the intervention approach.

Box 5. Step 6 according to Anita, Mrs. Gruda's daughter

*I regularly attend follow-up meetings with my mother's care team. During these meetings, we discuss different interventions we're trying with her and we brainstorm together about ways to further improve their effects on her vocal behaviours. We even talk openly about the work we're doing together to improve my mother's well-being (**reflect on the intervention approach**).*

*I have noticed that it's very important we all check whether the triggers of my mother's vocal behaviours have changed (**reflect on the meanings of vocal behaviours**) because they do change! For example, in the last month, my mother started screaming in the night and that was new. It seemed that her sleep was disturbed by something. We had a hard time finding the exact reason for the new vocal behaviour. We reflected on the situation together and during our discussion, the nurses' aides from the night shift reported that my mother seemed more anxious at night recently.*

*She startled easily and went on to scream with great emotion (**deductive and collaborative identification strategies of meanings**). We thought that hanging a picture of my father—who died five years ago—on the wall next to her bed could perhaps appease her (**reflecting on interventions**). This way, when the caregivers turn her, she would see a face that is reassuring to her. It worked well! She practically doesn't scream at night anymore. Caregivers have told me that when they turn her in bed, she quiets down and relaxes when she sees the photo.*

These follow-ups and moments of reflection make us all more aware of the changing meanings of my mother's vocal behaviours. This helps us continually review and update our interventions, so they promote even more well-being for her and… for us!

Conclusion

In summary, this intervention approach was designed by and for family and formal caregivers to improve the well-being of older people who manifest vocal behaviours. Flexible and cyclic, the intervention approach is based on the five (5) principles underlying six (6) steps. By pooling the care partners' ideas and strengths, it is possible to develop a better understanding of the older person and the interventions that are best suited to promoting her well-being and that of others who hear her vocal behaviours.

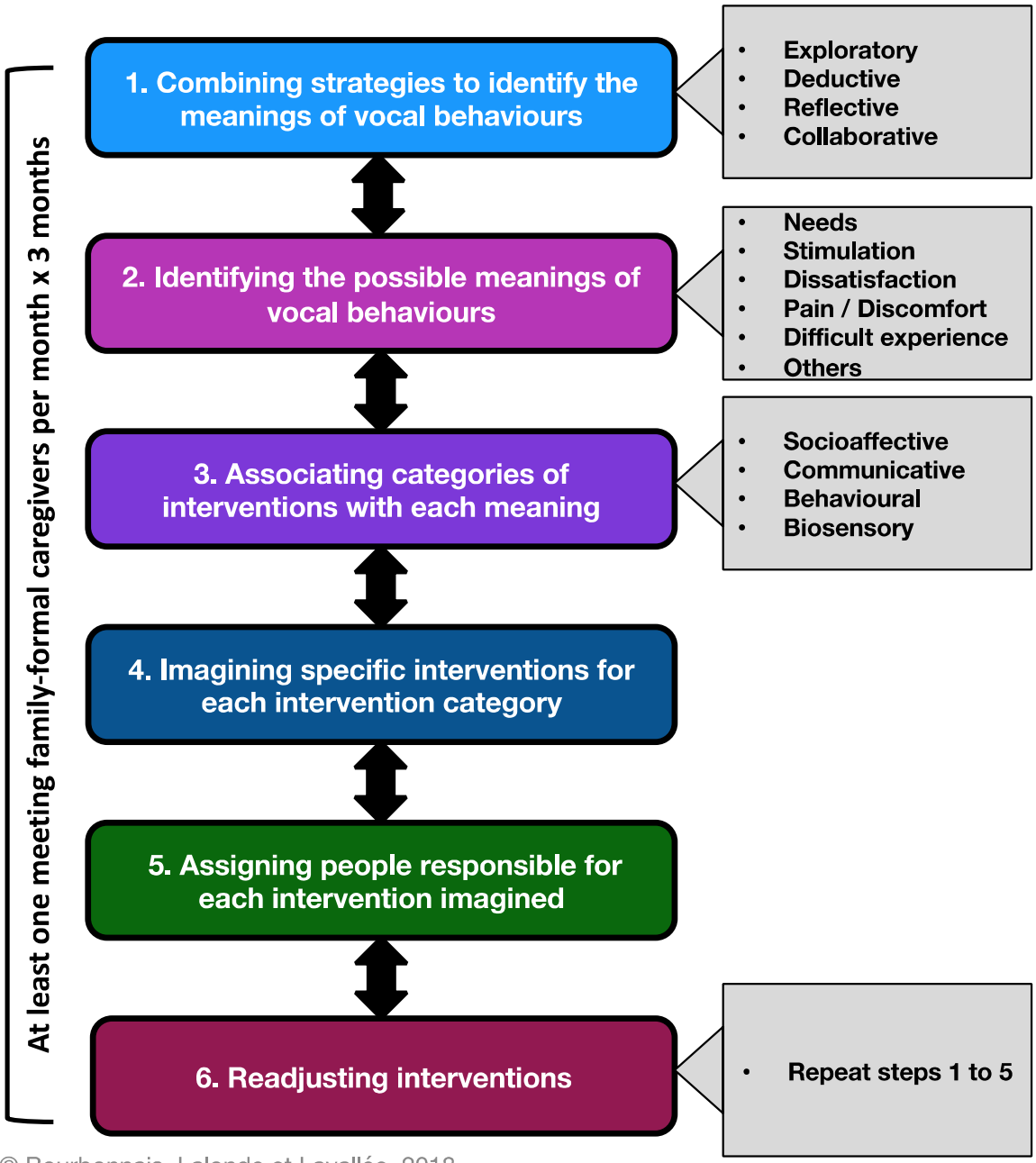
Toolbox

Tool 1: Memory aid for the intervention approach

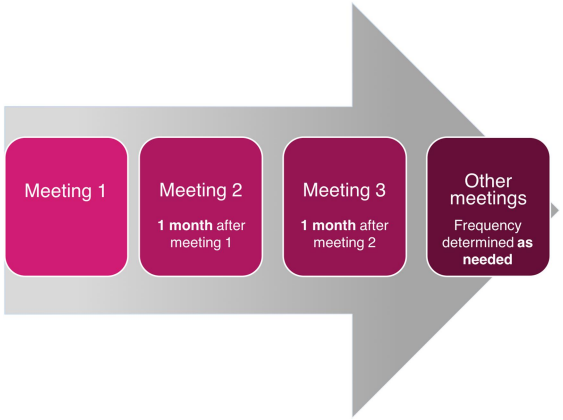
Decibels Intervention

PRINCIPLES

A. Building a partnership between older people, family and formal caregivers
B. Identifying the meanings of vocal behaviours
C. Using many interventions adjusted to the meanings of the vocal behaviours
D. Tailoring of interventions to each older person
E. Reflecting actively as a team



Tool 2: Partnership agreement



Name of the older person: _____

Name of the family caregiver: _____

Name of the formal caregiver completing the partnership agreement : _____

1. Our first meeting is planned for: _____ and it will take place at [indicate location]: _____ as follows: _____

_____

2. Our second meeting is planned for: _____ and it will take place at [indicate potential location]: _____ as follows: _____

_____

3. Our third meeting is planned for: _____ and it will take place at [indicate Potential location]: _____ as follows: _____

_____

Tool 3: Example script for organizing the first meeting with the family caregiver

The text below is an example of what can be said to the family caregiver of an older person with whom the intervention approach will be used. This first contact can be by phone or in person. This script will help you organize the first meeting and establish the basis of the partnership to come.

Hello, my name is [your name]*. I am* [professional title] *and I take care of your relative* [name of the older person]*. As you know, we'd like to try a new intervention approach with* [name of the older person] *to increase her/his well-being and reduce her/his vocal behaviours.*

To carry out the approach, we would like to work with you to better understand why [name of the older person] *has vocal behaviours and identify interventions that would help her/him feel better.*

That's why I wanted to talk to you today. I was wondering if we could set a time when the care team could meet with you to think together about what could be done. When would be a good time for you to come and meet us in the next few days? [Agree on a mutually convenient time for the family caregiver and the care team].

Thank you for agreeing to work with us to improve [name of the older person]'s *well-being. We'll expect you [day, time and place of the meeting].*

Tool 4: Sample questions for formal and informal partner meetings

First meeting: Examples of questions for partners (family and formal caregivers):

[Allow each partner—including the family caregiver—to answer each question]

Better understand the experience of each partner

- Could you tell us about the older person? Can you tell us any stories or experiences with this person to help us better understand who she is?

- How long have you been noticing her vocal behaviours?

- What is your reaction when she manifests vocal behaviours?

Start implementing the approach in partnership

- *Meanings of vocal behaviours (Step 2):*
  - What meanings have you identified for her vocal behaviours using the identification strategies (Step 1)?

  You can refer to the following groupings in Step 2:
  - *Needs*
  - *Stimulation*
  - *Dissatisfaction*
  - *Pain or discomfort*
  - *Difficult experiences*
  - *Others*

- *Categories of interventions (Step 3):*
  - What categories of interventions could be associated with the identified meanings of the older person's vocal behaviours?

  Refer to the following categories of Step 3:
  - *Socioaffective*
  - *Communicative*
  - *Behavioural*
  - *Biosensory*

- *Tailored interventions (Step 4):*
  - What are the specific interventions that you can imagine for each category of interventions associated with the meanings of the older person's vocal behaviours?

  You can refer to the examples for each category of interventions in Step 4.

- *People responsible for applying the interventions (Step 5):*
  - Who are the people who can best implement the interventions imagined?
  - Who will ask these people (if needed)?

Assessing the preferences and availability of each partner

- We have just completed several steps of the intervention approach. Do you have any suggestions or preferences on how to implement it now with the older person?

- When could we meet a second and third time? (If needed, you can use Tool 2 to record the scheduled meetings.)

- Where do you prefer to meet?

Subsequent meetings (second, third and subsequent): Examples of questions for partners (family and formal caregivers)

[Allow each partner—including the family caregiver—to answer each question]

Feedback on what has happened since the last meeting

- How is the partnership between family and formal caregivers going?
  - What is going well to ensure this partnership and encourage the family caregiver's active participation in creating and implementing the intervention plan?
  - What could be done better to reinforce this partnership and encourage the family caregiver's active participation in creating and implementing the intervention plan?
  - How can we get you more involved as a caregiver?

- How is the partnership between formal caregivers going?
  - What is going well to ensure the partnership between formal caregivers and encourage everyone's commitment to creating and implementing the intervention plan?
  - What could be done better to reinforce this partnership between formal caregivers and encourage everyone's commitment to creating and implementing the intervention plan?

- *Using the approach, work together to readjust the interventions (Step 6)*

  - What interventions for the vocal behaviours were tried since the last meeting?
  - Did they work?
    a. Are the vocal behaviours less intense?
    b. Do the vocal behaviours occur less often?
    c. Does the older person seem better?
    d. Do the people who hear the older person seem better?
  - What were the most effective interventions?
  - What interventions were not done? For what reasons?

- *Meanings of vocal behaviours (Step 2):*
  - Since our last meeting and using the identification strategies (Step 1), have you identified any new meanings for the person's vocal behaviours?
    - Have any meanings changed?

You can refer to the following groupings in Step 2:

- *Needs*
- *Stimulation*
- *Dissatisfaction*
- *Pain or discomfort*
- *Difficult experiences*
- *Others*

- *Categories of interventions (Step 3):*
  - What categories of interventions could be associated with the newly identified meanings of the older person's vocal behaviours?

  You can refer to the following categories in Step 3:

  - *Socioaffective*
  - *Communicative*
  - *Behavioural*
  - *Biosensory*

- *Tailored interventions (Step 4):*
  - What specific interventions can you imagine for each category of interventions associated with the new meanings of the older person's vocal behaviours?

  You can refer to the examples for each category of interventions in Step 4.

- *People responsible for applying the interventions (Step 5):*
  - Who are the people who can best implement the new interventions imagined?
  - Who will ask these people (if needed)?

Assessing the preferences and availability of each partner

- We have just completed several steps of the intervention approach. Do you have any other suggestions or preferences on how to implement it now with the older person?

- When could we meet next? (If needed, use Tool 2 to record the scheduled meetings.)

- Where do you prefer to meet?

Tool 5: Vocal behaviours and environment observation grid

Name: _____

Date of observations: _____

	Time of Observations				
Vocal behaviours					
☐ Type of vocal behaviours (moaning, repeating words/phrases, calling for help, etc.)					
☐ Intensity of vocal behaviours (not loud) 1 – 2 – 3 – 4 – 5 (very loud)	1 - 2 - 3 - 4 - 5	1 - 2 - 3 - 4 - 5	1 - 2 - 3 - 4 - 5	1 - 2 - 3 - 4 - 5	1 - 2 - 3 - 4 - 5
☐ Duration (seconds, minutes or hours)					
☐ Interval between vocal behaviours (seconds, minutes, hours or constant)					
☐ Comments					
Other behaviours					
☐ Walking or fidgeting without obvious reason (trying to leave, making repetitive movements, etc.)					
☐ Physically aggressive (hitting, pushing, spitting, etc.)					
☐ Other					
Formal caregivers in the environment					
☐ Number of formal caregivers					
☐ Comments (tone, vocabulary, gestures of formal caregivers, etc.)					

Residents in the environment					
☐ Number of residents					
☐ Comments (tone, interaction, gestures of residents, etc.)					
Family caregivers in the environment					
☐ Number of family caregivers					
☐ Comments (relationships, tone, interaction, gestures, etc.)					
Older person's activities					
1. Sleeping 2. Getting Dressed 3. Receiving hygiene care 4. Eating 5. Being with a visitor 6. Listening to music 8. Watching TV 9. Doing a leisure activity 10.Walking 11. Other					
Older person's location during observation					
a. Hall b. Bathroom c. Living room d. Nursing station e. Elevator f. Bedroom, in bed g. Bedroom, sitting h. Other					
Characteristics of the physical environment					
☐ Intensity of noise (low noise) 1 – 2 – 3 – 4 – 5 (high noise)	1 - 2 - 3 - 4 - 5	1 - 2 - 3 - 4 - 5	1 - 2 - 3 - 4 - 5	1 - 2 - 3 - 4 - 5	1 - 2 - 3 - 4 - 5
☐ Intensity of light (low light) 1 – 2 – 3 – 4 – 5 (high light)	1 - 2 - 3 - 4 - 5	1 - 2 - 3 - 4 - 5	1 - 2 - 3 - 4 - 5	1 - 2 - 3 - 4 - 5	1 - 2 - 3 - 4 - 5
☐ TV or radio noise (Yes or No)	Yes - No	Yes - No	Yes - No	Yes - No	Yes - No
Other factors to consider and additional notes					
☐ Pain? ☐ Quality of sleep? ☐ Physical restraint? ☐ Other					

Legend for the Vocal Behaviours and Environment Observation Grid

Vocal behaviours
This section allows you to describe the various characteristics of the older person's vocal behaviours.

- **Type** of vocal behaviours: Indicate all vocal behaviours observed by people in the environment that do not seem appropriate in the social context (e.g. moaning, word, syllable or sentence repetitions).
- **Intensity**: Rate the intensity of vocal behaviours, 1 being quiet and 5 being very loud.
- **Duration**: Measure and note the duration of the vocal behaviours (seconds, minutes, hours).
- **Interval between vocal behaviours**: Measure and note the silence between two series of vocal behaviours (seconds, minutes, hours).
- **Comments**: Specify any other element relevant to better understanding the vocal behaviours.

Other behaviours
This section allows you to describe the older person's other behaviours.

- **Walk or move without apparent reason**: Indicate the movements the older person makes without apparent reason (e.g. walking around or moving about).
- **Physically aggressive**: Specify any aggressive gestures.
- **Other**: Describe any other behaviours (e.g. entering other residents' rooms, moving objects, trying to get out of a physical restraint, throwing objects).

Formal caregivers in the environment
This section allows you to describe one of the aspects of the social environment, the presence of formal caregivers around the older person.

- **Number of formal caregivers**: Specify how many formal caregivers are in the older person's visual field (i.e. any member of the institution's staff).
- **Comments**: Describe what characterizes the formal caregivers' presence (e.g. What tone do they use when talking to the older person? What are their actions? Does the older person know them?)

Residents in the environment
This section allows you to describe another aspect of the social environment, the presence of other residents around the older person.

- **Number of residents**: Specify how many residents (i.e. other people living in the institution) are in the older person's visual field.
- **Comments**: Describe what characterizes the residents' presence (e.g. What tone do they use when talking to the older person? What are their actions? Does the older person know them?).

Family caregivers in the environment
This section allows you to describe another aspect of the social environment, the presence of family caregivers around the older person.

- **Number of family caregivers**: Indicate how many family caregivers (i.e. visitors, whether or not related to the older person under observation) are in the older person's visual field.

- **Comments**: Describe what characterizes the presence of the family caregivers (e.g. What is their relationship with the older person (daughter, nephew, friend, etc.)? What tone do they use when talking to the older person? What are their actions? Do they interact with the older person?)

The older person's activities
This section allows you to describe what the older person is doing during observation.

- Using the corresponding number, note what the older person is doing during the observation.

- If the older person is doing an activity other than those mentioned, write it down.

- If the older person is doing more than one activity, mention each.

The older person's location during the observation
This section allows you to describe where the person is during the observation.

- Using the corresponding number, note the older person's location during the observation.

- If the older person is in a location other than those mentioned, write it down.

Characteristics of the physical environment
This section allows you to describe the older person' physical environment.

- **Intensity of noise**: Rate the intensity of ambient noise, 1 being low noise and 5 being high noise.

- **Intensity of light**: Rate the intensity of ambient light, 1 being low light and 5 being high light.

- **TV or radio noise**: Indicate if the TV or radio is turned on in the older person's environment.

Other factors to consider and additional notes
This section allows you to describe other factors that may be associated with older people's vocal behaviours.

- **Pain**: Does the person seem to be in pain (e.g. does she grimace or moan when mobilized)?

- **Quality of sleep**: Does the older person sleep well? Did she get a good night's sleep last night? Is she drowsy right now?

- **Use of physical restraint** (i.e. limiting movements out of the older person's control): During your observation period, was a restraint used with the older person (e.g. a belt or table attached to a geriatric chair)?

- **Other**: Does the older person have an acute health problem? Did she just receive new medication?

Tool 6: Note sheet for partner meetings and example of a completed sheet

Date:_____

Meeting number: 1 2 3 4 5

Name of persons present / function: _____

Identified meanings of vocal behaviours	Categories of interventions associated with each meaning of the vocal behaviours	Interventions imagined for each identified meaning of the vocal behaviours	People responsible to apply the interventions imagined	Effects of the interventions

Example of a note sheet completed for Mrs. Gruda

Date: 2018-08-23

Meeting number: 1 (2) 3 4 5

Name of persons present / function: Anita (Mrs. Gruda's daughter); Raymond (head nurse); Mikaela (RN); Donald (nurse's aide); Maryse (LPN); Danielle (leisure technician).

Identified meanings of vocal behaviours	Categories of interventions associated with each meaning of the vocal behaviours	Interventions imagined for each meaning of vocal behaviours identified	People responsible to apply the interventions imagined	Effects of the interventions
Physical needs: – Using the toilet – Cravings – Fatigue	Biosensory	– Bring to use the toilet after meals – If munchies: give her herbal tea and cookies baked by her daughter – Put her to bed for an afternoon nap	– Nurse's aide – LPN – RN	Vocal behaviours stop
Socioemotional needs: – Having attention and affection – Being bored – Feeling anxious – Being angry – Being jealous	Socioaffective	– Morning: sit her close to her friend who holds her hand – Daughter's visit – Hug her – Let her show us her affection	– Resident: Mr. Réjean – Daughter – Nurse's aide – LPN – RN	Reduces the intensity of her vocal behaviours, especially when her daughter visits
	Communicative	– Joke with her – Use words in Polish (daughter has to write a few words phonetically in Polish)	– Nurse's aide – LPN – RN – Daughter	Smiles and laughs when we say words in Polish
	Behavioural	– Have her watch a DVD in Polish – Pamper her – Put cream on her hands	– Nurse's aide – LPN – RN	Vocal behaviours stop, but after 20 minutes of watching a DVD, she starts screaming again
	Biosensory	– Have her listen to her favourite music – Share a musical moment with her	– Nurse's aide – LPN – RN	Vocal behaviours reduced, but we have to go share the musical moment with her; if not, she starts screaming again

Pain: – Osteoarthritis – When mobilized	Biosensory	– Mobilize her very slowly and gently – Put a hot pad on her lower back – Give her painkillers, as needed	– Nurse's aide – LPN – RN	She seems to have pain despite the interventions, so she still screams; her medication needs to be reassessed
Stimulation: – A lot of noise	Biosensory	– Try to reduce the noise around her when she is in the dining room by moving her slightly behind the others	– Nurse's aide – LPN – RN – Daughter	Sometimes it is difficult to reduce the noise around her, so the intervention isn't so effective
Difficult experience: – Finds current situation "not a life" – Feels loss of control	Communicative	– Get her to participate and give her choices – Explain everything we do when we are with her	– Nurse's aide – LPN – RN	She smiles and does not scream during the intervention
Dissatisfaction: – Does not have what she wants – Is not included in a conversation	Biosensory	– Place her favourite object in her visual field	– Nurse's aide – LPN – RN	Starting to have vocal behaviours less often
	Communicative	– Involve her in the conversation if we are talking with another resident close by	– Nurse's aide – LPN – RN	She smiles more and does not start screaming
<u>NEW MEANING</u> *Socioemotional needs:* – Anxiety during the night	Socioaffective	– Put a picture of her late husband next to her bed	– LPN – Daughter	Almost no more vocal behaviours at night

Because we are all concerned

RESEARCH CHAIR IN NURSING CARE FOR OLDER PEOPLE AND THEIR FAMILIES

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