

An intervention approach to optimize the well-being of older people living with Alzheimer's disease who scream: Results of an action research

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*42nd Annual Scientific and
Educational Meeting, Canadian
Association of Gerontology*

October, 18th 2013

With the financial support of...



- Donald Berman Maimonides Geriatric Centre Foundation



- Groupe de recherche interuniversitaire en interventions en sciences infirmières du Québec

Problem

- 80% of older people in a long-term care facility (LTCF) live with Alzheimer's disease or a related disease
- Among them, 15 to 60% scream

(Canadian Institute for Health Information, 2012; Conseil des aînés, 2007; Litgow et al., 2011; Youn et al., 2011)

Definition of screams

- Vocal behaviour that does not seem appropriate in the context
- Observed by people within the environment
- Intensity, frequency and duration vary

(Bourbonnais & Ducharme, 2010; Cohen-Mansfield et al., 1990, 1992; Hallberg & Norberg, 1990; Misztal, 2001)

Interventions mentioned in the literature

- Biomedical treatment
- Behavioural approaches
- Modifying the physical environment
- Modifying the social environment
- Using multiple interventions



Lack of efficacy: interventions are not based on the meanings of screams

(Christie & Ferguson, 1988; Cohen-Mansfield, Libin, & Marx, 2007; Cohen-Mansfield, & Werner, 1997; Doyle, Zapparoni, O' Connor, & Runci, 1997; Ramadan & Naughton, 1999)

But...

- Strategies to identify meanings of screams and to associate them to an intervention are not known



Hinder the development and implementation of helpful interventions

Goal

- To develop and evaluate interventions based on the meanings of screams of older people living with Alzheimer's and related diseases

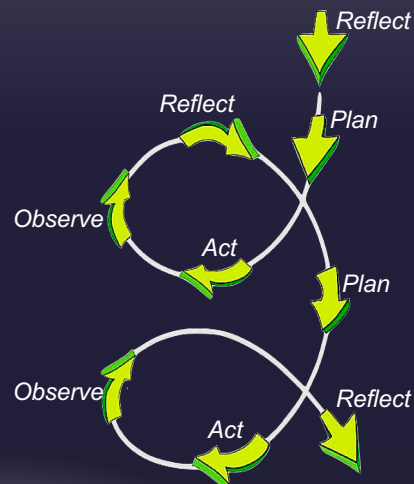


Project in 2 phases

1. Conceptualization of a process to identify the meanings of screams by formal caregivers with family members
2. Development and evaluation of interventions based on these meanings

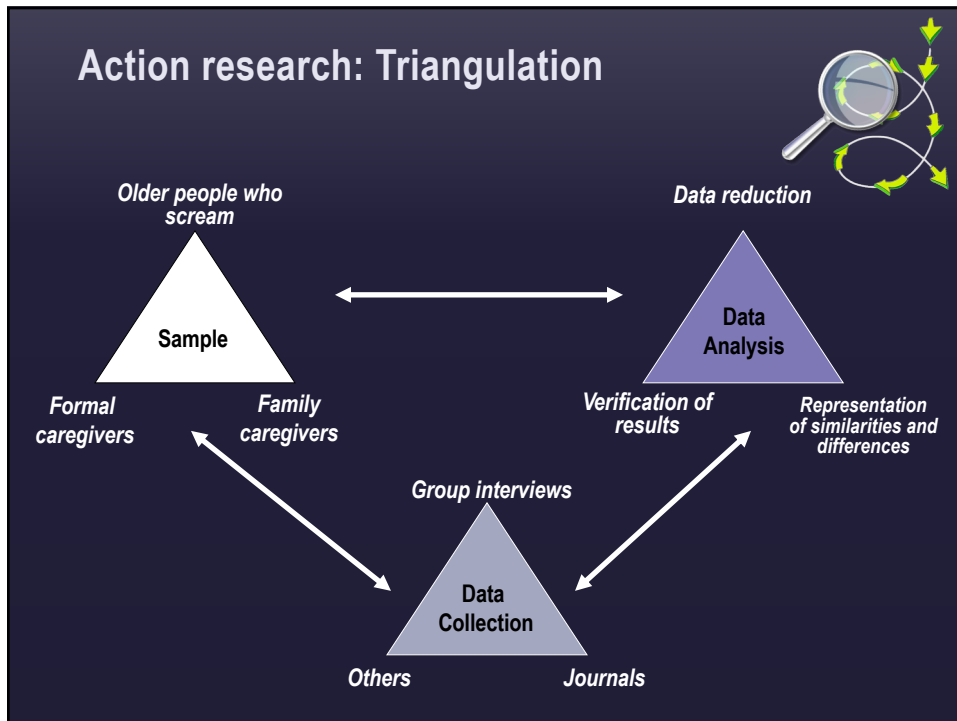
Method: Participatory action research

- To plan and apply an intervention with the people concerned by the problem
- To improve a professional practice with the participants
- To link research and practice
- To change the actual condition of the clinical setting

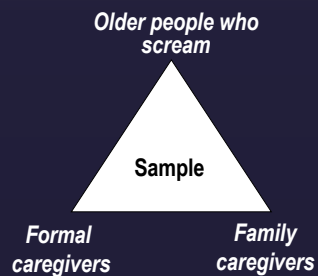


(Waterman, 2001)

Action research: Triangulation



Sample: 8 triads

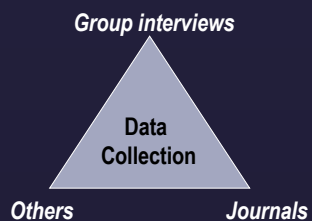


- **Older people**
 - Manifesting vocal behaviours
 - Having a diagnostic of Alzheimer's disease or a related disease
- **Family caregivers**
 - Being a main caregiver of the older person
- **Formal caregivers**
 - Being a registered nurse (RN), a registered nursing assistant (RNA) or a nurse's aide (NA)

Sociodemographic characteristics

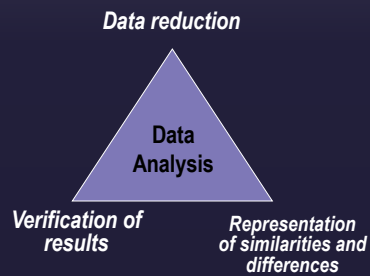
- **Older people (n = 8)**
 - Mean age: 89.5 years old (SD = 4)
 - ♀ : 5 ♂ : 3
 - Dementia severity: 6 / 8 = moderate or severe
- **Family caregivers (n = 10)**
 - Mean age: 62.6 years old (SD = 17)
 - ♀ : 7 ♂ : 3
 - Daughter / son (5), spouse (1), nephew / niece (2), other (2)
- **Formal caregivers (n = 17)**
 - Mean age: 48 years old (SD = 10)
 - ♀ : 12 ♂ : 5
 - RN (4), RNA (2), NA (10), other (1)
 - Average years of practice with this population: 13 years (SD = 11)

Data collection



- Group interviews with :
 - one or more family members of an older person who screamed
 - an RN working with this older person
 - other formal caregivers (RNA, NA, recreation therapist)
 - using semi-structured interview guides
- Participants and researchers journal
- Sociodemographic questionnaires

Data analysis

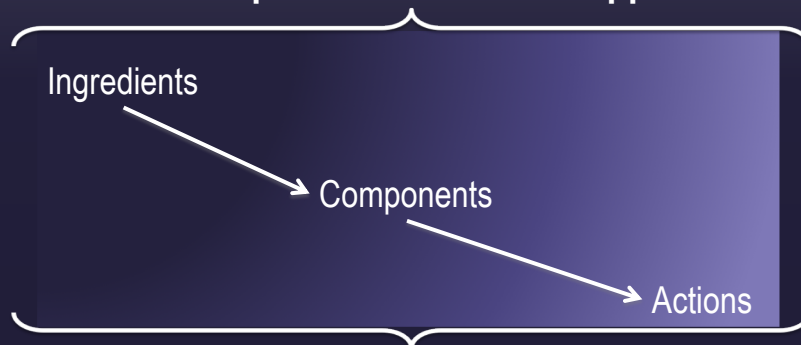


- **Qualitative approach**
- **Instrumental case study**
 - 1 case = 1 triad
 - Chosen to understand a phenomenon better
- **Analysis strategy**
 - intratriad
 - intertriads

(Miles & Huberman, 2003; Stake, 2000)

Results:

A multicomponent intervention approach



(Sidani, 2011)

Results:

Intervention ingredients

- Partnership in triad
- Searching for the meanings of the behaviour
- Using multidimensional interventions coherent with the meanings
- Personalization of interventions
- Reflective practice

Results:

Intervention components

1. Strategies to identify the meanings of screams
 - Exploratory, deductive, collaborative, reflective
2. Possible meanings of screams
 - Needs, stimulation, dissatisfaction, discomfort ...
3. Categories of intervention
 - Socioaffective, cognitive / communication, behavioural / leisure
4. Specific interventions
 - Reminiscence, humour, music ...
5. Actors applying the interventions
 - Other residents, family, staff, volunteers ...
6. Reflective process and readjustment of interventions

INGREDIENTS	
COMPONENTS OF INTERVENTIONS APPROACH	ACTIONS
1. Strategies to identify the meanings of screams	1.1 Prerequisite 1.2 Combine identification strategies 1.3 Organize team meeting including family member(s)
2. Possible meanings of screams	2.1 Identify the meanings of screams in partnership
3. Categories of intervention	3.1 Associate each meaning with an intervention category in partnership
4. Specific interventions	4.1 Imagine specific interventions for each intervention category in partnership
5. Actors applying the interventions	5.1 Associate a maximum of people (other resident, family, staff, etc.) to execute the interventions in partnership 5.2 Share with these people the interventions 5.3 Follow-up on the implementation and effects
6. Reflection and readjustment of interventions	6.1 Organize another team meeting including family member(s)

Results: Perception of effects on screams and other people

- From the perspective of family and formal caregivers:
 - ↓ screams of older person: slightly to completely
 - ↑ well-being of older person
 - ↓ disruptiveness for family and formal caregivers
 - ↑ empowerment of family and formal caregivers
 - ↑ partnership between family and formal caregivers

Mrs. Rachel's nurse's aide to her daughter

I could probably say [she is screaming less] at night because of the environment. When we turn her [in bed], there is now a picture of her brother, yes, once we turn her, she gets very quiet, she is relax. It is more like a home for her now. It helps calm her down.

Results: Involvement of participants in knowledge transfer

- Results on intervention components written up as an exemplar:
 - “Mrs. Adrianna, her daughter and a professional caregivers”
- Nurse's aides volunteered for a public reading/playing of the exemplar to colleagues
- Triggered discussion on:
 - results
 - knowledge transfer into professional practice

Conclusion

- Promising intervention approach to increase well-being of older people, family and formal caregivers in LTCF
- Contributes to increase partnership between family and formal caregivers
- Effects will be formally evaluated in coming research projects:
 1. Pilot study
 2. Practical clinical trial

I will be happy to answer your questions

Thank you!