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Article

"Not alone in loneliness": a qualitative evaluation of a programme promoting social capital among lonely older people in primary health care

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Abstract: Loneliness is a frequent negative feeling among older people. A programme aimed at alleviating loneliness among older people by promoting social capital, i.e. social support and participation, was conducted in primary health care centres in Spain. We aimed to explore participants' experiences of loneliness and social participation before the programme, perceived programme effects and contextual influences. A descriptive-interpretative qualitative design was used. 41 persons were included comprising older people, health and social care professionals, and volunteers. Data were collected through three focus groups, 36 semi-structured interviews and participant-observation of the intervention. A thematic content analysis was applied. Older persons with diverse profiles of loneliness and participation decreased their loneliness, increased their knowledge and participation in local community assets, and developed companionship, a sense of belonging, peer support and friendship. Their mental wellbeing increased and participants could deal better with health or family problems. An empowerment process was observed. However, loneliness persisted among some widowed participants and health and social vulnerabilities hampered some impacts. Conflicts and exclusion were occasional unintended effects. The promotion of social capital in ageing to alleviate loneliness involves complex processes interrelated with health and socio-economic factors. Future programmes should be adapted to local contexts and participants' characteristics.

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1. Introduction

Loneliness is a negative feeling due to the perception that the social needs of the person are not corresponded, neither in quantity nor in quality, by the social relationships that the person has [1]. While social loneliness occurs when the number of relationships with friends and colleagues is smaller than desired, emotional loneliness refers to situations where the wished intimacy in confidant relationships is not realized [2].

Older people undergo major changes in their social environment mainly due to retirement, widowhood, loss of peers, and age-related disability, and are especially at risk of social and emotional loneliness [3]. Likewise, three ageing crises are related to loneliness: the identity, autonomy and belonging crises [4]. These refer, respectively, to no longer feeling like who they used to be, or being able to do what they used to do, and not belonging to the places and groups of persons to which they used to belong.

From a policy perspective, the WHO Active Ageing paradigm encourages to foster social participation and social networks for ageing people [5,6]. However, the processes involved in the promotion of social relationships and participation in ageing remain unclear [3].

Several risk factors are associated with loneliness: being female, living alone, limited education, small social network, low self-efficacy, poor self-rated health, depression, and recent bereavement [7,8]. Moreover, loneliness is highly influenced by context. Loneliness differs across Europe being higher in the southern countries [9]. The north-south gradient has been related with lower participation in social organizations and the importance of personal networks for individual welfare and well-being in southern countries compared to Northern European countries.[10] Also the cultural emphasis in southern countries on family and social relationships seem to increase social expectations on personal networks that in turn could lead to increased loneliness if the expectations are not fully met [11–13].

Loneliness is a risk factor for negative health outcomes and an increased use of health services [14,15], while adequate social relationships, social support, and social participation are protective health factors [16]. Indeed, trials increasing social support are the most widely applied strategy among older people to tackle loneliness [17].

Certain intervention characteristics are related to a higher efficiency at reducing loneliness, such as theory-driven interventions. [18–20]. However, it is not yet clear which theory supports more effective interventions. The Loneliness Model proposes that chronic loneliness entails a cognitive bias consisting of a self-reinforcing loop associated with negative social expectations that cause social distance [14]. It supports cognitive behavioural therapy to correct deficits in social skills and address maladaptive social cognition [17]. On the contrary, the empowerment theory considers that loneliness is potentially alleviated through empowering lonely older people to increase their self-esteem and feeling of mastery over their own life [21–23]

Regarding effects, a systematic review on interventions based on social capital targeting older people showed few and diverse trials assessing the impact on loneliness and they were generally ineffective.

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However, some successful studies targeted complex cases of loneliness, and social capital interventions successfully increased quality of life, well-being and self-perceived health among lonely older people [24]. In this vein, an intervention in Finland focused on empowering lonely older people, achieved successful improvements in a wide range of health outcomes including mortality, but not in loneliness [23]. Their qualitative analysis showed how lonely participants built trust and encouragement and continued to meet [25]. A programme based on facilitating community knowledge and networking among older migrants in Japan through volunteers as gatekeepers, decreased loneliness and increased social support [26]. Therefore, whether and how programmes decrease loneliness remains unclear.

A programme was conducted in Spain to alleviate loneliness among older people attending primary health care and has been previously described [27]. The design was built on the operationalization of the social capital theory applied to ageing [27–29], targeting both individual and the community social capital (multilevel social capital) as well as structural and cognitive components of social capital. The intervention thus promoted social support between peers and with volunteers (cognitive social capital) and social participation (structural social capital) by enhancing engagement in activities in community assets. In line with previous work, social capital was here seen as social resource available to all group members that enabled collective action and thereby their empowerment. While previous literature clearly suggests health beneficial effects of social capital, less is known about social capital interventions and how social capital can be built for health promoting purposes. This study therefore extends previous knowledge by looking into the individual process of building social capital while acknowledging community level settings and features. The intervention was evaluated with mixed methods. According to the quantitative evaluation, loneliness decreased and social participation and support significantly increased [27].

This paper corresponds to the qualitative evaluation of this intervention, as a complementary approach to the quantitative evaluation to further understand the impact of the programme. The study aim was to: explore participants' experiences of loneliness and social participation prior to the programme; describe whether and how the programme had an effect on loneliness, social participation, and support and health; describe whether and how participants' health and the context influenced these processes.

2. Materials and Methods

2.1. Design

A descriptive-interpretative qualitative study was selected to identify the perceived impact of the programme on participants according to their experiences. These findings were triangulated with the perceptions of volunteers and health and social care professionals, as agents involved in the programme, and with the observations of researchers.

This research applies the framework of the Active Ageing paradigm formulated by the WHO [5].

2.2. Setting of the programme

The programme was conducted from December 2011 to July 2012 in three primary health care centres in Catalonia. One intervention group was conducted in each zone: one in a semi-rural area (Cardedeu, zone A); and two in an urban area, Barcelona: one in a low (zone B) and one in a medium (zone C) socio-economic neighbourhood. Settings were selected by convenience to evaluate the viability of the intervention in different contexts [27].

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2.3. Study participants

The study population comprised 26 older people who participated in the programme, nine older volunteers and six health and social care professionals. Participants of the programme were invited in person by the researcher (LCP) to take part in this qualitative study, and agreed to participate. Participants were women apart from one man. Table 1 details the main characteristics of all 41 informants.

We intended to interview all 26 participants who finished the programme out of 38 older people who started, but 23 were available. None of the participants was excluded for any other reason. Moreover, one participant who had dropped out of each intervention group was selected taking into account their gender and the heterogeneous reasons for leaving the programme: two women, one of whom dropped out to care for a family member and the other had an injurious fall, and one man who started a social activity. Furthermore, nine older volunteers who accompanied the three intervention groups were interviewed. One man and one woman initially involved as volunteers were not available. All six professionals involved as facilitators or observers were interviewed.

Table 1. Characteristics of participants, volunteers, and professionals interviewed.

Context	Technique	Number of informants	Age	Gender	Educational level/ Occupation**
Zone A: Semi-rural context with a medium socioeconomic level.	Participants*				
	One focus group	Five participants	65-74 y.: 1 75-80 y.: 2 over 80 y.: 2	Five women	One with medium education and four with low education
	Eight individual semi-structured interviews	Eight participants	65-74 y.: 1 75-80 y.: 5 over 80 y.: 2	Eight women	One with medium education and seven with low education
	Volunteers				
	One interview in small group	Four volunteers	65-74 y.: 1 75-80 y.: 2 over 80 y.: 1	Four women	Low education
	Professionals				
	Two individual semi-	Two professionals from primary health care	30-50 y.: 1 51-65 y.: 1	Two women	One nurse One social worker

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	structured interviews	and social services			
Zone B: Urban context with a low socioeconomic level.	Participants*				
	Focus groups	Nine participants	65-74 y.: 2 75-80 y.: 4 over 80 y.: 3	Nine women	Low education
	Individual semi-structured interviews	Eleven participants	65-74 y.: 2 75-80 y.: 6 over 80 y.: 3	Eleven women 6 3	Low education
	Volunteers				
	One interview in small group	Two volunteers	63 and 80 years old	Two women	Medium and low education
	Individual semi-structured interview	One volunteer	63 years old	One woman	High education
	Professionals				
	Two individual semi-structured interviews	Two professionals from primary health care	30-50 y.: 1 51-65 y.: 1	Two women	Two social workers
Zone C: Urban context with medium socioeconomic level.	Participants*				
	One focus group	Seven participants	65-74 y.: 1 75-80 y: 2 over 80 y.: 4	Six women and one man	One with high education, six with low education
	Seven Individual semi-structured interviews				
	Volunteers				
	One interview in small group	Two volunteers	73 and 76 years old	Two women	Medium education
	Professionals				

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	Two individual semi-structured interviews	Two professionals from primary health care	30-50 y.: 2 51-65 y.: 0	Two women	One social worker and one nurse

*Note: All participants who were individually interviewed had previously participated in the focus groups, except three from zone A and two from zone B, who were only individually interviewed.
**"Educational level" applies to older participants and volunteers and "occupation" refers to professionals.

2.4. Data collection techniques

Three focus groups with older participants and 36 semi-structured interviews were conducted: 26 with older participants, six with professionals, one with a volunteer and three with small groups of volunteers. Interviews and focus groups were conducted at the end of the intervention, in June-July 2012. Most older people were interviewed twice: in the focus groups conducted in their natural group during the last session of the programme, and in an individual interview, in order to gain more personal information about their situation prior to the programme, the process carried out and the effects perceived.

Moreover, participant-observation was conducted in all 15 sessions of the programme in the three zones by one or two researchers, providing a total of 58 field notes from observations. Consequently, researchers established a rapport with participants during the 4.5 months. Participants were aware of the researchers' involvement in the programme.

Semi-structured interviews and focus groups were used following a topic guide with open-ended questions. Focus groups with participants explored the perceived effects on participants regarding loneliness, social support and participation, and health, accounting for contextual factors. In the interviews, participants were asked about their loneliness and participation prior to the programme and the effects perceived. Volunteers and professionals were asked about their perceptions of the process and effects on participants.

Interviews with participants were partly conducted at participants' homes and partly in a local senior club. Focus groups and interviews with professionals and volunteers were conducted in each primary health care centre. Interviews lasted approximately one hour and focus groups approximately 1.5h. All techniques were conducted by two female researchers (LCP, medical doctor, and GV, sociologist).

2.5. Data analysis

All conversational techniques were digitally recorded and transcribed (by DR, sociologist). A thematic content analysis was conducted. The analysis involved a triangulation of techniques, researchers, and informants. Two researchers (DR, sociologist, and LCP, medical doctor) independently analysed the transcripts according to following steps: 1) formulation of preanalytical intuitions after successive readings of the transcriptions and the notes from documentary techniques; 2) creation of an initial analytical plan and text codification; 3) creation of categories by grouping the codes according to the analogy criterion based on pre-defined themes (experiences prior to the programme, the process and effects, influences of health, and context) and new emerging elements from the discourses, with a a continuous cross-checking between the categorization and the source

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of the data that combined a deductive and inductive approach; 4) analysis of each category and relationship with the others.; and 5) elaboration of the new text with the main results.

The results were structured to build an explanatory framework of the process of change that participants underwent during the programme and their perceived effects of the main influencing factors. The results and the framework were discussed with the entire research team and verified with the corpus when needed. Informants verified results by providing their feedback on preliminary results. An informative richness for a deeper understanding of the phenomenon was achieved and data saturation was reached in the main categories for women.

2.5. Ethical considerations

The ethics committees from Universitat Autònoma de Barcelona and IDIAP Jordi Gol approved the protocol. The informants participated voluntarily after signing informed consent forms. Anonymity, confidentiality and protection of stored data were guaranteed.

3. Results

Throughout the paper, "participants" refers to older people participating in the programme and "informants" comprises all agents involved: participants, volunteers, and professionals.

Figure 1 shows the explanatory framework. In brief, participants entered the programme with different experiences of loneliness and participation. The programme promoted a social network among peers and their knowledge of local community assets. Different effects of loneliness and participation were achieved. Participants' vulnerabilities limited the effects of the programme. Conflicts and exclusion were also generated as unintended effects.

Figure 1. Explanatory framework of the experiences of participants before, during and after the programme.

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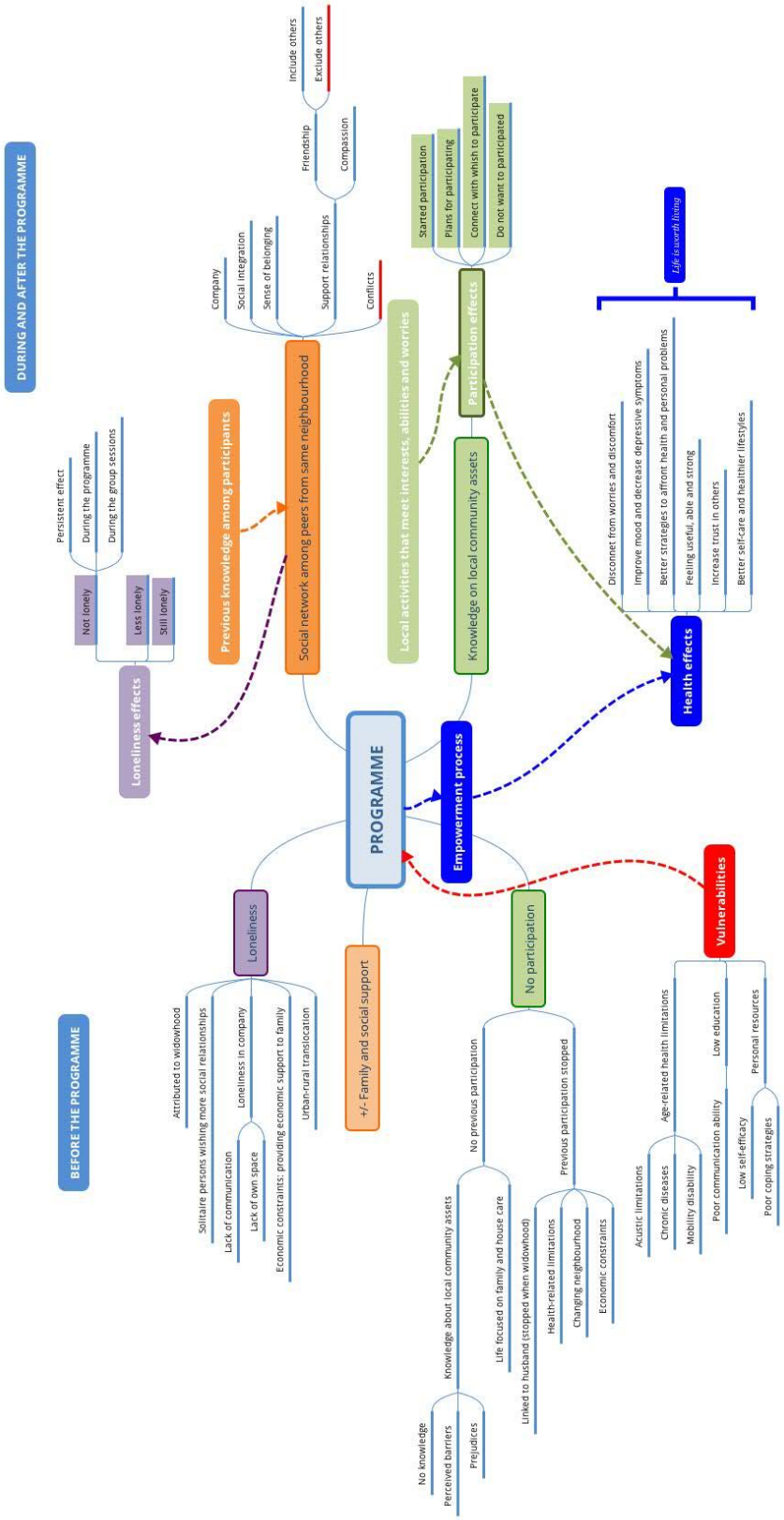

3.1. Participants' experiences of participation and loneliness prior to the programme

Two profiles of participants were identified regarding previous experiences of participation. The first profile was composed of participants with no previous experience of formal participation. They were women with a low educational level and mainly widowed. Their life had been focused on family and

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house care, and caring had been a barrier for participation. They shared trajectories of disempowerment, lack of courage to participate alone and renouncing to make decisions that they considered would be unfaithful towards others. Some women had no friends, had done informal activities only with their husbands and stopped when they passed away. Some of them were not informed about community assets, or had prejudices, especially about senior clubs.

The second profile had previous experience of social participation. They were mainly single, divorced or widowed, including the only widower. Widows who had participated together with their husbands in community assets had ended participation when their husbands passed away. Those who had participated on their own had conducted activities for other people (e.g., sewing), with others (e.g., social activities) or to help others (e.g., volunteering) and it had been a source of mental wellbeing. They had stopped mainly due to age-related health problems (e.g., chronic pain), economic problems, or translocation. Stopping them had contributed to their loneliness. Nevertheless, some participants reported having found ways of coping with limitations to maintain some informal activities, like overcoming pain to go for a walk.

Three main profiles of participants were identified regarding experiences of loneliness. In the first profile, participants expressed their loneliness as a consequence of widowhood. Their husbands' absence had left a void that was impossible to fill and finding a new partner was disregarded to avoid being a "servant" again or because their husband was irreplaceable. Moreover, a recently widowed man who dropped out had joined the programme to find a new partner. They were living alone, suffered from loneliness mainly at home and coped with it by talking with their deceased husband, going out for a walk or having a pet.

Many of them had cared for family members and started to feel lonely after or while caring. They explained feeling lonely despite the support perceived and received from their family and neighbours. In some cases, widows suffered depressive symptoms and anxiety or had a pharmacologically treated depression. Nevertheless, a minority of them expressed widowhood as a relief from a constrictive marriage.

The second profile comprised some long-term widowed, divorced or single participants who expressed that they were solitary. They felt well-being alone but expressed having a fear of relating with others, a lack of social relationships and that they received pressure from their family to interact more.

In the third profile, participants were suffering from loneliness in company. They had moved to live with their children due to health problems, or their children and grandchildren had moved to live with them due to economic problems. Older women expressed missing having their own space and a lack of communication with their children, who had little time for them.

In addition, providing economic support to their children was a strong source of worry that intensified their loneliness.

Loneliness was also worsened by a recent or prolonged translocation and by not having built a sufficiently fulfilling social life.

Table 2. Participants' Verbatims Categories regarding participants' experiences prior to the programme.

PARTICIPANTS' EXPERIENCES PRIOR TO THE PROGRAMME

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Category		Verbatim Quotations	Participant characteristics
Experiences of participation	No previous experience of formal participation	"He didn't want to go, because I sometimes said "let's go and see". We live beside the senior club… (…) but I didn't have the strength to say "if you don't come, then I'll go on my own"".	Participant 5, Woman, 78 years old, Zone C.
	Previous experience of social participation	For a long time I used to go there every day (to a centre for disabled children) ... look at my knee, I've needed an operation for 18 years but I decided not to have it, and I can't feed them from sitting, because sometimes you have to hold their head and I can't.	Participant 1, Woman, 83 years old, Zone C.
Experiences of loneliness	Loneliness as a consequence of widowhood.	I'm missing the most important thing, I'm missing my husband.	Participant 29, Woman, 78 years old, Zone B.
	Participants who expressed that they were solitary	I've done it (joining the programme) mainly because I had a problem relating with others, isn't that right?	Participant, N. 18, Woman, 65 years old, Zone A.
	Suffering from loneliness in company.	My daughter and I have a good relationship but I can't have any conversations with her… She takes care of me if I am ill … but I can't tell her stories about older people; they are very tedious, because she has no time. It's true, she works long hours and has no time. She would like to listen to me and so on but she says "Ah Mum, not today, I have no time, maybe on Sunday…"	Participant 28, woman, 71 years old, Zone B.
	Providing economic support	And now I'm turning 74 years old. I thought than when I was old, I would have my retirement prepared, I thought I could live my life a bit. But I see it is the other way round, that now I have	Participant 2, Woman, 73 years old, Zone C.

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		to be there for the others, instead of them being there for me; I am the one who has to be there for everyone."	
	Loneliness worsened by translocation	"I say "so, you were the one who wanted to live here (in the semi-rural area), you go, you leave me alone and I remain here"	Participant 13, Woman, 75 years old, Zone A.

Quotations from participants' discussions included in this table were translated by a professional scientific bilingual translator.

3.2. Perceived effects on participants during and after the programme

Professionals and volunteers observed changes in participants that they attributed to the intervention. The effects were more intensive among those participants who adhered more, showing a dose-response effect.

3.2.1. Effects on social support

Professionals and participants expressed that the programme was especially successful at promoting mutual support. Living in the same area gave them a feeling of familiarity, and participants often met each other on the street, and sometimes walked together back home.

In the urban context, the programme contributed to less hostile neighbourhoods, and previous knowledge among participants was less frequent than in the semi-rural areas but more favourable to develop friendships.

According to participants, the group provided companionship, a feeling of social integration and sense of belonging to the group. The group was perceived as a space of attention, respect and affection to give and receive emotional support. When a participant suffered an injurious fall, was in low mood or had a new illness, support relationships could be observed.

Many participants were part of a group for the first time and for some participants, the group was the only place they had to socialize.

Participants discovered that peer relationships, as opposed to relationships within the family, provided a way of communicating shared worries and interests by sharing a similar age.

Participants identified others as a model to follow or, on the contrary, as a model to avoid, evoking positive changes.

Some participants became friends, and started visiting and calling each other. While some people were previously aware of missing having friends, others made friends for the first time.

In some cases, new friends generated subgroups that integrated other participants, including those who were more socially isolated. In other cases, friendships were closed and some participants felt excluded.

The group comprised different profiles regarding educational levels, age-related disability and health problems, which unified but also divided the group. Some participants expressed having felt united and treated without differences. However, those with mobility limitations and hearing impairment were at higher risk of not establishing friendships and dropping out. Nevertheless, some participants and volunteers developed support relationships with more vulnerable participants, moved by

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compassion. Telephone contact was especially relevant between participants with mobility limitations or living apart, and also for volunteers to support participants.

The few participants with a higher educational level expressed not sharing interests with the rest. For them, feeling valued and helpful for more vulnerable participants was key to remain in the programme. In one group, there was a conflict with one participant. She felt more skilful and was jealous of those who participated more in the group.

3.2.2 Effects on loneliness

Most of the participants reported that their loneliness decreased after the programme by feeling accompanied by peers and professionals, and thanks to the bonds established and to having become aware of and engaged in local activities of their interest. While some people said they no longer felt lonely because of new friendships, others continued to suffer from loneliness, but with less intensity. The awareness that loneliness was a common matter helped them to cope with it by realizing they were not alone in their loneliness.

Some participants expressed a transitory impact on loneliness. For them, home was the space of loneliness, while the group and the street were relational spaces. Likewise, some participants said that the positive impact would vanish once the group finished. Nevertheless, thinking and talking about the programme with others also helped them to feel less lonely.

Some widows who attributed loneliness to widowhood reported no impact on loneliness. They continued not accepting it but reported an increase in social relationships.

3.2.3 Effects on social participation

According to all types of informants, the programme was generally successful at helping participants to discover and sometimes engage in local activities.

Visiting community assets allowed participants to get a sense of what was available and to remove prejudices. Moreover, some people went back to community resources where they used to go with their husbands.

The visits included testing local activities and triggered participation in a wide range of activities. Some participants started participating in activities immediately and others started later during the programme. They became engaged in activities that suited their interests, abilities or worries (e.g., memory training). Belonging to the group facilitated becoming engaged with other peers. Thus, new friends easily did new activities together, accompanying each other and reinforcing their friendship. Other participants made concrete plans to start activities the following year and some exclusively connected with their wish to participate. For some participants, socializing was very important but participating in activities was not. The impact on participation was limited by low self-confidence and low communication ability, often related with low education.

Some participants, especially those who had been caregivers over the past years, discovered the value of doing activities with other people.

3.2.4 Health effects

Participants, professionals, and volunteers agreed on the improvement in mental health. The programme was seen as a strategy to prevent or alleviate depressive symptoms. Many participants took anti-depressive drugs and/or tranquilizers and explained feeling better after the programme.

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Some women expressed that the programme was a salvation to them. One participant explained having solved her sleep problems.

According to the professionals, the intervention broke a withdrawal within themselves with an obsessive focus on illnesses and woes related with loneliness by connecting with others, awakening the wish to remain connected and helping them to forget about their worries.

Sharing their woes and coping strategies among peers was generally relieving and helped them to deal with them, although specific people needed to feel their suffering was greater.

Specifically, sharing the way in which they talked with their deceased husbands to overcome loneliness helped them to feel better instead of "crazy", as they said.

In terms of positive mental health, participants reported an improved subjective well-being, becoming aware of worse circumstances and valuing their situation more. They reported being more understanding and empathic, and having more trust in other people; particularly those who were more closed and socially isolated. Others explained being more compassionate, respectful and having learned not to judge others. Likewise, they also reported feeling less worried and more able to deal with economic, family and health problems. Those living with family members expressed having learned to be more tolerant in cohabitation with other household members.

An empowerment process was observed that contributed to alleviating their loneliness. According to the three groups of informants, the programme contributed to the development of personal potential and autonomy to participate and to live their life as they wanted, with less dependency on their children. They had a feeling of strength and of power to decide.

Participants attributed their empowerment to the attention and value received. Also, realizing they had helped peers was very satisfying and increased their self-esteem, since it gave value to their life experience. Accordingly, feeling useful and able instead of useless meant that their life was not ending and was worth living. In particular, those participants with a life trajectory that was family-oriented, said that they felt more free. Those participants with severe physical conditions felt connected with their wish to live by becoming aware that others do care about them. They were aware of their own empowerment process and participants mutually reinforced each other. It was strange for them having lived until then without these satisfying aspects of life. However, participants did not see themselves able to lead the continuity of the group and wanted someone as a leader to tell them where to go.

Empowerment was also enhanced by discovering new interests. Becoming engaged in local activities like physical activity and memory training especially promoted healthy ageing, but their physical activity also increased by starting to participate.

The programme had some effects on self-care and healthy lifestyles. Participants were motivated to dress smartly, some of them rediscovering the desire to get dressed up after widowhood by identifying some participants as a model to follow.

Two participants with hearing impairment felt motivated to wear the hearing aid that they had not used before because they wanted to feel connected to others in the group.

Through the programme, they became aware of the relevance of taking care of their own health, especially those who had cared for a spouse and whose own health and self-care had not been a priority before.

Nevertheless, participants reported limited effects on physical health, since many participants reported suffering from chronic conditions with aches that were difficult to alleviate.

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Table 3. Participants' Verbatims Categories regarding perceived effects

PERCEIVED EFFECTS OF THE PROGRAMME			
Category		Verbatim Quotations	Participant characteristics
Effects on social support	Peer relationships to communicate and share worries and interests	We are the same age, you can talk about the same things… youth, depending on the topic… you talk but…, I don't know, youth is very different. (…) For me, the company of one or the other is different. With the group companions there …, I don't know, maybe it's another freedom, another thing because since we all speak about the same thing, pretty much, about what happens to us and about what we do not have…	Participant 29, Woman, 78 years old, Zone B.
	Participants with affinity becoming friends	(...) because I don't tend to go out with friends here and there. But now it's different, since I've been coming here (…) Look, I get on very well with Maria, she's a lovely and good woman and we get on great together. For her it's the same; she says "I've found a shoe for my foot, because I don't trust anybody but you".	Participant 37, Woman, 77 years old, Zone B.
	Participants feeling excluded.	... and they seem to have become very united to go out on walks together (…), but I go by and they are sitting there and never say "do you want to come with us'", so I go home....	Participant 2, Woman, 74 years old, Zone C.
	Relationship with more vulnerable participants, moved by compassion	The one I see who needs to cheer up is Margalida, she is very down... (...) For me it's no effort because it's something I've done all my life, listen to people and be at their side and support them. Let them tell you things, especially that… I'll go and see her this week, because she called me the other day and I went to her house and now I want her to come to my house.	Volunteer 2, Woman, 77 years old, Zone A.
	Conflicts	You can see that she doesn't stop talking, she always wants to speak… and from the first day there has been a	Social care professional 1, Woman, Zone C.

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		conflict and everybody saw there was a conflict. Even Jose said he didn't feel comfortable because of her. And of course, this has restricted the dynamic a bit, hasn't it? It hasn't been easy…	
Effects on loneliness during the programme	Loneliness decreased	I don't feel lonely, now I have friends. Participant 28, Woman, 71 years old, Zone B. Like bread and butter; loneliness is easier to digest when in company.	Participant 4, Woman, 78 years old, Zone C.
	Transitory impact on loneliness	I am happy to join the group, but then, when I get back home, I fall apart, I need to be on the street with someone… at home, alone, is bad…	Participant 35, Woman, 81 years old, Zone B.
	No impact on loneliness	Since my loneliness is due to missing my husband, it cannot be replaced, at the moment, or ever.	Participant 13, Woman, 75 years old, Zone A.
Effects on participation	Getting a sense of what was available and removing prejudices	The satisfaction of seeing things I had never seen before, although you imagine them, you've seen them on TV, but being there inside, you see it, you touch it, it is a big satisfaction...	Participant 5, Woman, 78 years old, Zone C.
	New friends do new activities together	Carme and Teresa meet up to go to the cinema, since they live near each other, and Carme does not like going out on the street on her own at night. They meet up to see the film that the parish puts on in the cinema and has been recommended to them, but it's not a planned activity; it's an extra outing.	Field note, researcher LCP, referring to participants 10 and 13, Women, 75 and 80 years old, Zone A.
	Limited impact by low self-confidence and low communication ability	She tells me she's odd and that she thinks everything is very nice and would like to get involved but she doesn't feel capable because she is silly, she doesn't express herself well, she talks poorly...	Field note, researcher LCP, referring to the participant 30, Woman, 84 years old, Zone B
	Discovering the value of doing activities with other people.	Everything we did there was new to me. Everything…	Participant 12, Woman, 79 years old, Zone A

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Health effects	Sharing their woes and coping strategies among peers as relieving	By participating, you don't feel lonely, with everything you are experiencing.	Participant 18, Woman, 65 years old, Zone A.
	Empowerment process, autonomy to participate, feeling of strength and of the power to decide	My daughter wanted me to spend every Sunday with them, but I didn't like it and I used to say "but why do I have to be here every Sunday?" and she'd say "so that you're not on your own" (…) And now, if one day I don't want to go for lunch I say "today, I won't come for lunch, don't wait for me because I'll be with Maria", now it's different.	Participant 37, Woman, 77 years old, Zone B.
	Feeling useful and able; life is not ending and is worth living	(With the programme) you have another stimulus, you feel like living, you feel like someone needs you for something. You feel that you, life, or God or whatever, needs you for something. Do you know what that feels like?	Participant 29, Woman, 78 years old, Zone C.
	Preventing or alleviating depression and other mental health problems	For me, beforehand, I wasn't able to go anywhere on my own. Now, I've changed! If I had to go for an X-Ray, I had to be accompanied, and, since I have claustrophobia, in a lift and things like that… but now, I go alone wherever it may be, an X-ray, Sant Pau (Hospital)… I'm a different woman!	Participant 5, Woman, 78 years old, Zone C.

Quotations from participants' discussions included in this table were translated by a professional scientific bilingual translator.

4. Discussion

The programme alleviated participants' loneliness, increased their participation in local activities, and provided peer support. Moreover, their mental wellbeing increased, and participants could deal better with their woes and worries. An empowerment process was observed through social capital building, participants experienced new freedoms and became reconnected with the sense that life was worth living. However, the programme did not alleviate loneliness among those participants who were missing their partner and those with social and health-related vulnerabilities.

The results of the qualitative and quantitative evaluation of the programme were convergent regarding effects on loneliness, social support, and participation. Regarding health effects at post-intervention, only qualitative findings suggested changes that validated scales could not detect. However, at two years follow-up, the quantitative evaluation did detect a decrease in depressive symptoms in line with the qualitative findings [27].

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The main effects of the programme on mental health are in line with the protective effect of social capital on mental wellbeing among older adults [29].

Our results are consistent with research reflecting that handling loss is key in the attitude towards participation and social relationships [30]. Our study adds that interventions might encourage lonely people overwhelmed by loss to connect with meaningful activities and establish positive social relationships.

Our findings are consistent with the qualitative results of other programmes [25]. In both studies, participants enjoyed sharing their diverse experiences on loneliness, although particular cases competed to be the worst case. Mutual support was observed, subgroups developed, and participants especially helped those who were more vulnerable. Meetings outside the group were self-organized. Rarely, mild conflicts in relation with game power were present and affected the group dynamic. Participants increasingly paid more attention to their appearance. The heterogeneity in age-related limitations influenced the group dynamics, limiting the participation of those more vulnerable participants.

Low socio-economic level and poor physical function hindered engaging in the programme and limited the process of change among participants. This is in line with previous research that shows that socio-economic factors are key factors linking social relationships with health [3].

The empowerment process observed confirms the suitability of the empowerment model informing a successful design of the intervention. The distinction between social and emotional loneliness could partly explain why some widowed participants remained emotionally but not socially lonely. The Loneliness Model could partly correspond to the type of loneliness observed by professionals prior to the programme; a self-reinforcing loop centred on illnesses and woes. However, participants were released from it at least during the programme. Indeed, social relationships and participation seemed to create a positive self-reinforcing loop; opening participants up to others and to new experiences, relativizing their situations and encouraging them to get out of an introspective state, and thus involving more social relationships, and more participation that brought more meaning to their life.

The programme helped participants to overcome, at least in part, the three ageing crises of autonomy, identity and belonging and consequently brought the feeling that life was worth-living to participants and alleviated their loneliness [4]. It helped them to take care of their image and health, to take up their interests again, and provided them with the feeling of belonging to the group and their neighbourhood. Mutual support helped them to overcome or cope better with their limitations and they felt more capable and useful.

The role of modelling, and the increased self-efficacy reported, are in line with social cognitive theory. Moreover, the Stages of Change of the Transtheoretical Model supports the different levels of change described among participants: some participants started the action during the programme (participation), others were in the preparation stage (were ready and made concrete plans), while others were in the contemplation stage (getting ready, connecting with their wish to participate) [31].

In line with the salutogenic approach, effects were mainly reported on well-being, the social aspects of health and positive mental health, and there was also a decrease in ill mental health [3].

Lastly, the historical and cultural context seems to configure a generation of older women who had grown up assuming traditional roles of dependence on their husbands. Some of them remained powerless in widowhood, while others were relieved, and others managed widowhood well alone over time. In addition, the economic crisis seems to have worsened the experience of the ageing process and enhanced loneliness.

Strengths and limitations

The rapport built between researchers and participants during the programme generated a trust that facilitated the sharing of personal experiences in the interviews, although it might also have influenced their answers, consciously or unconsciously wanting to please researchers. Nevertheless, the assumptions we had as researchers regarding how and why the programme should have reduced their loneliness were challenged from the first group session to the last interview.

Among informants, men were rare, since women were a clear majority among participants and the only gender among volunteers, professionals and researchers. Moreover, older people who adhered to the intervention were the majority among informants. Nevertheless, three people who dropped out for different reasons were interviewed, and observations included all participants since all sessions were observed.

The richness and complementarity of the information generated with the different techniques and the three types of informants are noteworthy. Effects reported by older people at the end of the programme were triangulated with those perceived by volunteers and professionals and with the observations of researchers during the process.

Lastly, primary care professionals involved were especially motivated to work on loneliness, and their expectations of the programme might not apply to other primary health care contexts. Accordingly, caution is required before transferring these results to other settings, but the similarity with other studies in different contexts suggests their applicability.

Implications for research, practice and policy

More qualitative evaluations of interventions are needed to explore processes and intervention effects on loneliness, addressing its complexity, including context specificities.

Regarding the intervention design, guaranteeing the continuity of the group remains a challenge, as well as an appropriate follow-up to enhance, if needed, participants' engagement in the social activities in community assets. Strategies are needed to focus on those persons with social and health vulnerabilities and, consequently, at risk of dropping out or of being socially excluded during or after the programme.

This programme supports the WHO Active Ageing policy and provides insight into how to enhance social networks and participation while ageing to enhance well-being.

In addition, our findings should support current practices and policies of social prescribing programmes, which link primary care patients with community resources with the aim of strengthening participation and social support, and promoting health, particularly mental health, and well-being [32].

Nevertheless, the role of primary health care in loneliness interventions may differ according to the cultural context and the characteristics of the health and social care system and the community resources available [33]. In any case, attention must be placed on not medicalizing loneliness when interventions are developed in primary health care.

5. Conclusions

This study contributed to understanding the complex processes that are involved in the promotion of social relationships and participation in ageing to alleviate loneliness, how they are interrelated with health, socio-economic factors and age-related disability. Specifically, it has clarified whether

and how an intervention that promotes social capital tackles these conditions enhancing processes of change among lonely older people. Therefore, these findings should support further designs, and the implementation and evaluation of more effective interventions, which should be flexible to adapt to contexts and participants' characteristics.

Supplementary Materials:

Not applicable.

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Appendix A

Not applicable.

Appendix B

Not applicable.

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