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"Baixem al carrer" [Come Outside]: ten years working to improve the health of people isolated by architectural barriers

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The "Baixem al carrer" [Come Outside] programme aims to reduce the loneliness and isolation of senior citizens who find it difficult to leave their homes due to architectural barriers, as well as improving their quality of life and their mental and physical health. It offers them the chance to go outside and recover their social lives, through voluntary work and the use of a stair lift on community stairways, improving their social networks, their relationships with their neighbours and citizen participation. The intervention was designed by the community in Poble Sec in 2009 as part of the "Barcelona, health in our neighbourhoods" programme, and in recent years it has been extended to the entire city. This article first presents the development and evaluation of the programme for the 2009-2015 period, and then covers its situation in 2019. The results from the first period show an improvement in people's state of health and quality of life after they had been taking part in the programme for six months. In 2019, after being progressively expanded, "Come Outside" is being implemented throughout the city through three service providers, with municipal funding. From January to November 2019, 275 people were helped in 38 city neighbourhoods, going on a total of 757 outings. The current challenges are to consolidate and extend the programme, guarantee care for everyone who needs it and to improve the quality of the service.

Introduction

Social isolation and loneliness, defined as a subjective experience involving the absence or involuntary loss of company (Dickens, 2011), lowers senior citizens' quality of life and increases their mortality rate (Hand, 2017; Singh, 2009). Many elderly people feel lonely because they have lost their partners or other loved ones (Hand, 2017; Singh, 2009). and their loneliness is increased when they experience difficulties with mobility, because they come up against architectural barriers that prevent them from leaving their homes and interacting with their surroundings (Gené-Badia, 2019). The positive effects of participation and social support on the health, well-being and life-expectancy of senior citizens are well documented (Wilkins, 2006). Participation in social or leisure activities and interaction with relatives and friends improve their reasoning and are a source of emotional support (Hsu, 2007; Glei, et al. 2005). People who maintain social relations and get actively involved in life are happier, have a better state of physical and mental health and have a

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greater capacity for facing up to changes and life transitions (Pool, 2017, Niedzwiedz, 2016, Cattan, 2005).

“Barcelona, health in our neighbourhoods” (BSaB) is a community health programme that was initiated by the Barcelona Public Health Agency in 2007, in collaboration with the Barcelona Health Consortium and the city’s districts, with the aim of reducing health inequalities among the city's neighbourhoods (Fuertes, 2012; Diez, 2012). During these twelve years, priority has frequently been given to combating loneliness and social isolation among senior citizens, associated with architectural barriers, in the neighbourhoods where the programme has intervened. The data shows that in 2018 in Barcelona, 21.6% of city residents were over the age of 65, and 25.6% of them lived alone. In the same year, 31.6% of Barcelona buildings did not have a lift, and this percentage was higher in the neighbourhoods with the worst economic and social indicators.

In 2009, as part of the BSaB programme in the neighbourhood of Poble Sec, community analysis revealed the existence of people who had no contact with their surroundings because they lived in a building that did not have a lift. This fact, together with the knowledge of a risk of psychological and physical deterioration for isolated people and the improvement in health produced by social interaction, led to the neighbourhood's Plan for Community Development and the Barcelona Public Health Agency (ASBP), together with the Primary Care Centre (CAP) and other major stakeholders in the neighbourhood's health service, to develop and undertake the pilot project for “Come Outside” (previously known as “Puja’m, baixa’m” [Get me up, get me down]). The intervention helped to reinforce the neighbourhood's community network, because it responded to a need that had been identified by professionals, community stakeholders and local residents. And two years later, the pilot programme was extended to Sant Pere, Santa Caterina i La Ribera and to the three Zona Nord neighbourhoods: Ciutat Meridiana, Torre Baró and Vallbona. Evaluation of the pilot project showed an improvement in various health indicators for the people taking part (Díez, et al. 2014), and this led to the programme being gradually extended to other areas from 2013 onwards.

The objectives of this article are, firstly, to describe the programme and its results in regard to health during the first implementation phase (2009-2015) and secondly, to describe its current situation, in the phase where the programme has been extended throughout the city, including a brief description of the participants’ profile and the programme's future challenges.

Development and evaluation of the “Come Outside” programme (2009-2015)

This section presents the programme and its objectives, criteria for inclusion, activities and evaluation results for the 2009-2015 period. The objective of the “Baixem al carrer” [Come Outside] programme was to reduce the loneliness and isolation and improve the quality of life and general and mental health of senior citizens who find it difficult to leave their homes, due to architectural barriers, and offer them the chance to recuperate their social lives. It was also aimed at people who could get out of their homes because they lived on the ground floor, but were experiencing social isolation due to mobility problems on the street. The specific objectives of “Come Outside” included improving the social networks and neighbourhood relations of isolated senior citizens and fostering volunteering and citizen participation.

The programme was aimed at people over the age of 65 who were experiencing unwanted social isolation and loneliness due to architectural barriers, such as stairs and steps in their buildings that prevented them from getting out to the street, or mobility problems. The criteria used for inclusion during this period were having been unable to leave their homes for three months or more and not suffering from a serious pathology. The criteria used for exclusion were: a) living in a building where the stairs made it impossible to use a stair lift or where it was impossible to use an ambulance chair (due to the stairs, obesity, etc.), b) suffering from a cognitive deficit or severe dementia that made it difficult to interact with other people, c) the healthcare team advised against the person leaving their home for health reasons and d) bedridden people. The detection of participants was carried out by primary care teams, social services teams and community stakeholders that were part of the neighbourhood community committees. Once they had been detected, the service provider team studied the viability of the solution and, where possible, offered

the person the chance to get out of their home. The people using the programme made periodic outings to do activities, accompanied by volunteers. There were various types of outing available:

- Weekly or fortnightly outings, where the participants agreed the proposed type of outing with the volunteer, such as strolling in the street, visiting acquaintances or going for a coffee. These outings lasted between two and four hours.

- Outings to take part in activities run by the service provider organisations, relating to special dates (Sant Jordi, Christmas, etc.) or cultural activities such as going to the theatre or on guided visits.

- Outings to take part in activities organised by neighbourhood organisations, such as activities with schools or group outings with other neighbourhood programmes, such as the Health Schools.

- Group outings, either groups from the neighbourhood or outings with participants from all the Barcelona areas taking part in the programme. These outings were usually six-monthly in nature and involved visiting interesting places in the neighbourhood or the city.

These outings can be divided into three groups:

- The volunteer offering their hand in order to provide stability and confidence when the participant was able to reach the street under their own steam, but with appropriate supervision.

- Using a motorised stair lift for going up and down stairs, indicated in cases where a person's physical deterioration meant they were unable to reach the street. Once the person was on the street, they could go for a stroll either accompanied or in a wheelchair.

- Using an emergency-evacuation chair, used in exceptional cases where the person was unable to help with their own mobilisation and where the stairway did not meet the technical requirements for using a stair lift.

Evaluation

The Barcelona Public Health Agency undertook a pilot evaluation that showed very favourable results for the health of participants(Díez, et al. 2014). The results for the 2010-2015 period were analysed at a later date, using a larger sample, which included operations in the neighbourhoods of Poble-sec; Sant Pere, Santa Caterina i la Ribera; El Raval; El Besòs i el Maresme; Ciutat Meridiana; Torre Baró and Vallbona. A non-experimental design was used to evaluate the before and after data for the programme. The data was compiled by interviewers, who gave the participants a questionnaire before they joined the programme and after the first six months of participation and a minimum of four outings.

The following explanatory variables were analysed: a) sociodemographic characteristics: gender, age, months without having left their home, residential neighbourhood and educational level; and b) characteristics of the received intervention: number and type of outings. The dependent variables were those of perceived health, mental health and quality of life. The answers to perceived health were dichotomised as good (average, good or very good) or bad (poor or very bad). Mental health was measured using the general-health questionnaire (GHQ-12) and it was analysed as a variable category in which people with three or more positive responses were considered to be at risk of suffering from deficient mental health (Goldberg, 1978), and also as a continuous variable from 0 to 36, which applied a Likert-type score to each answer. Quality of life relating to health was assessed using the EuroQol scale (EuroQol, 1990), which measures five factors: mobility, personal care, daily activities, pain or discomfort and anxiety. The EuroQol EQ-5D-3L scale has three levels of severity for each item, which was dichotomised as “no problems”, “some problems” and “serious problems” (Janssen, 2015). The participants’ general satisfaction

with the programme was also measured, in terms of the frequency, duration, time, place and punctuality of the services, and finally, whether they would recommend the programme to other people.

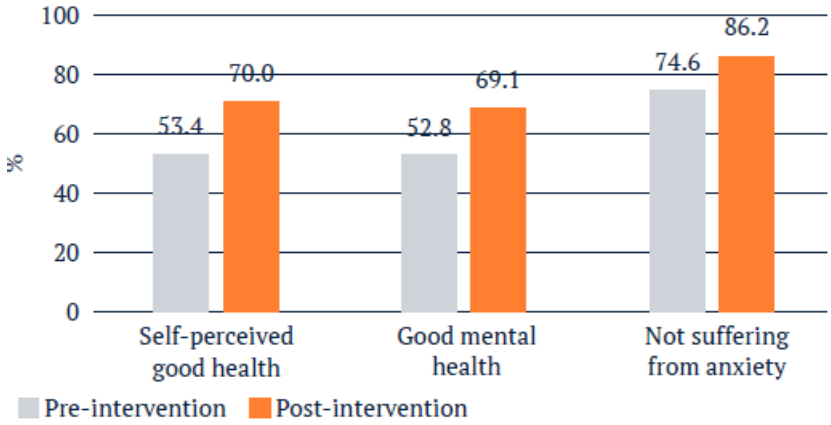
The sociodemographic characteristics of the participants for the 2009-2015 period (n=135) are described in Table 1. The participants were mostly women (58.5%), aged 85 or over (44.8%) who had not left their homes in four months or more (55.9%). Among the people lost to the study during the monitoring period or those who remained in the study, no differences were observed in terms of gender, age or time without leaving their homes, but the people who were lost to the study had a lower educational level. The participants made an average of eighteen outings (average of eight outings) during the six months that were studied. 40% of the participants needed the support of a volunteer's arm to go down the stairs and undertake the outing, and 35% needed to use the stair lift, under the supervision of a volunteer, as they had limited mobility.

Table 1. Sociodemographic characteristics of participants (n=135) and the intervention. Barcelona, 2010-2015

Individual characteristics	% (n)
Gender	
Women	58.5 (86)
Men	41.5 (61)
Age	
59-74	14.0 (20)
75-84	41.2 (59)
⩾ 85	44.8 (64)
Residential neighbourhood	
El Poble Sec	27.7 (36)
Sant Pere, Santa Caterina i la Ribera	28.8 (42)
Ciutat Meridiana, Torre Baró i Vallbona	27.4 (40)
El Raval	15.1 (22)
El Besòs i el Maresme	4.1 (6)
Time without leaving their home	
< 4 months	44.1 (60)
⩾ 4 months	55.9 (76)
Level of education	
No education	21.6 (27)
Primary	55.2 (69)
Secondary	19.2 (24)
University education	4.0 (5)
Individual characteristics	**% (n)**
Number of outings	
4-8	53.4 (71)
9-24	24.1 (32)
⩾ 25	22.0 (29)
Average (DE)	18.0 (21.3)
Median (interquartile range)	8 (7-18)
Type of outing	
Help with walking	40.5 (51)
Stair lift	34.9 (44)
Others	24.6 (31)

After the intervention, there was a statistically significant improvement in the participants' perceived health, mental health and anxiety. The perception of good health increased from 53.4% to 70%; good mental health rose from 52.8% to 69.1% and the percentage of participants not suffering from anxiety rose from 74.6% to 86.2% (Graph 1). No significant changes appeared in other quality-of-life aspects (mobility, personal care, daily activities, pain or discomfort).

Graph 1. Perceived health, mental health and anxiety before and six months after the intervention (n=135). Barcelona, 2010-2015



The participants were very satisfied with the programme (an average of 9.3 out of 10 points). 99% stated that they would recommend the programme to other people. All the satisfaction factors (frequency of outings, duration, time, place and punctuality) were qualified as adequate by nearly 100% of the people taking part, and the frequency of the group outings was the only item considered to be less satisfactory (Graph 2).

Graph 2. Satisfaction of participants according to various factors. Years 2010-2015

“Come Outside” ten years later

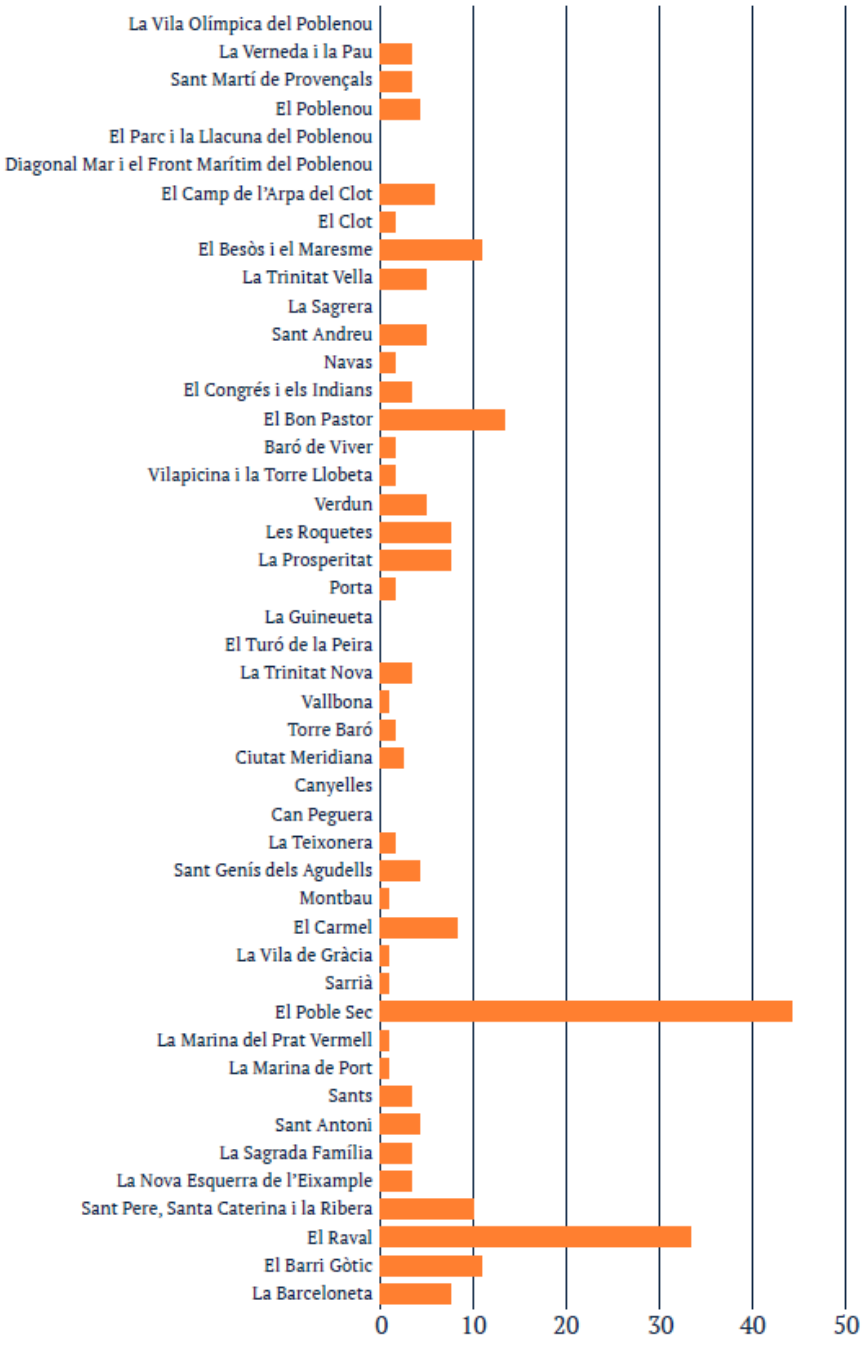
In 2013, in light of the positive results for various health factors in programme participants, an agreement to expand the intervention and make it a city-wide programme was signed between Barcelona City Council, the Red Cross and subsequently with the Poble Sec Organisation Coordinator, with the collaboration of the ASPB. In the last two years, in light of some indicators, such as the proportion of buildings without lifts, and in accordance with demand, the programme has been extended to the neighbourhoods that have the highest proportion of people at risk of suffering undesired social isolation and loneliness. In 2019, “Come Outside” was operational in 46 of Barcelona's 73 neighbourhoods, with weekly outings, and in the rest of the city, in response to specific demands, with fortnightly outings. The service is currently provided by three organisations: the Poble Sec Organisation Coordinator, the Barcelona Red Cross and Airun SL, coordinated by Barcelona City Council’s Department of Health, with the collaboration of the ASPB and

In general, the programme is run in a similar way to the previous period (2009-2015). It is presented to the community’s driving forces or health committees which are able to monitor the programme, analysing the monthly data in their regular meetings. The cases are detected by primary healthcare and social services teams, along with other community stakeholders (services and organisations in contact with the target population). When a potential participant is detected, the data is sent to the neighbourhood’s primary social healthcare team, which makes an evaluation based on health aspects and refers the person to the organisation. The organisation's technical staff carry out a new social evaluation of the person and their surroundings during a visit, in order to ensure the service is appropriate, along with a more detailed technical evaluation to facilitate going downstairs (by stair lift or on foot) and concerning support items (wheelchair, walking stick or walker) and companions. In cases where the person does not meet the criteria for inclusion, there is a follow-up to determine the reasons why they have not been included and a recommendation for referral to other, more appropriate support services is issued.

In regard to the outings, there must be a technician to operate the stair lift, and wheelchairs, walking sticks and walkers are also necessary. One or more people are also needed to accompany the participant during the activity, once they have reached the street. The organisations providing the service usually count on volunteers to accompany the participants, and in cases where volunteers are not available, there has been collaboration with people linked to Barcelona Activa employment plans. The average duration of each outing is two and a half hours, including the time needed to go down and upstairs, to and from the person's home, and the time needed for the participant to do the activity. The total time varies according to the person's degree of mobility, the neighbourhood's topography and the weather conditions. The outings are undertaken from Monday to Friday, preferably in the morning and early afternoon, depending on the season of the year. The outings are weekly in the most disadvantaged neighbourhoods and fortnightly in all other neighbourhoods.

From January to November 2019, 275 people participated in the programme, going on a total of 3,756 outings. 71% are women, 74% are aged 85 or over, 61% live alone or with their partners and 30% live with other relatives. Graph 3 shows the number of participants from January to October 2019, according to their residential neighbourhood. The programme surveys participant satisfaction every six months. As in previous years, there is a high rate of satisfaction.

Graph 3. Participants according to their residential neighbourhood (n=275). Barcelona, 2019



Strengths, limitations, conclusions and challenges

According to the evaluation of the results, "Come Outside" helps to improve the health of its participants. Significant improvements are observed in perceived health and mental health, as well as lower levels of anxiety, mainly among people who had not left their homes for a long time prior to the programme, those people with lower education levels and those that had gone on more than nine outings during the analysed period. There was a high level of satisfaction with their participation.

The main strength of the study is that it was one of the first community interventions to combat loneliness among isolated elderly people and measure the results on people's health using validated scales. The main limitation of the evaluation is the absence of a control group. This was not included, because using a control or comparison group with an experimental design was not

advisable for ethical reasons and because of the limited number of eligible participants. Another limitation may have been the inverse causality between the number of outings and perceived health, i.e. that the participants in a better state of health may have been more likely to go on more outings that those in a worse state of health. However, some features reinforce the results: a) the intervention's pilot programme showed similar results in the self-evaluation of health, mental health and reduced anxiety (Díez, 2014); b) the improvements observed in the variables are greater than the maturation bias, as both the self-perceived health and mental health of elderly people tend to deteriorate over time, c) the degree of satisfaction described by nearly all of the participants. In regard to the programme's strengths, "Come Outside" included the networking of various institutions and community stakeholders, including Barcelona City Council's Department of Health, the Neighbourhood Plan of Barcelona City Council, the Barcelona Public Health Agency, the Barcelona Health Consortium with primary healthcare teams, the Municipal Institute of Social Services with primary social services care teams, and the networks of associations and other community stakeholders in the city.

During its latest period, the "Come Outside" programme has reached its consolidation phase, in which various aspects have been worked on: a) expanding and agreeing on the criteria for inclusion and exclusion, b) improving the diffusion of the programme among CSB social workers, c) monitoring the reasons for not including participants and their referral to other programmes, d) systematising the collection of personal, health and satisfaction data from the participants. Future challenges include the consolidation of the programme as a city resource, reinforcing the project's technical and community quality, and incorporating it into social strategies, such as the social care blocks.

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