

PROGRAMME FOR PRESCRIBING HEALTH ASSETS FOR PHYSICAL ACTIVITY

EVALUATION PROCESS AND RESULTS

The programme evaluation was based on two approaches: one quantitative (before and after study) and another qualitative (interviews).

Before and after study

The before and after study was designed without control group. It was performed in 3 primary health centres (PHC) in the Valencian Region, covering 6 municipalities (Alboraia/Alboraia, Castellnou/Castellново, Navaixes/Navajas, Penyalba/Peñalba, Sogorb/Segorbe, València/Valencia). The study was carried between December 2017 and May 2018.

Participants were women and men recruited at the PHC by physicians, nurses and social workers. Inclusion criterion was not meeting physical activity (PA) recommendations by the World Health Organisation, synthesised as 30 minutes a day of moderate PA at least for 5 days a week. Exclusion criterion was having any medical contraindications for PA (physical disabilities, acute diseases, etc.). Every participant accepted taking part in the programme by giving an informed consent.

Data collection was made by two surveys, the first when accessing the programme (T0), and the second 3 months after practising the prescribed PA (T1). Surveys were fulfilled either at the PHC or by phone call.

The survey included sociodemographic variables, the type of activity and scales for self-esteem, health-related quality of life and perceived health state:

- Sociodemographic variables: age, sex, education level (none, primary, secondary or university studies), employment status (active or inactive), habitation (rural or urban), cohabitation (alone or shared).
- Type of physical activity practised
- Self-esteem: Rosenberg Self-Esteem Scale, in the Spanish adaptation.
- Health-related quality of life: EuroQoL-5D
- Perceived health status: Visual Analogue Scale EuroQoL, ranged 0-100.

The data analysis was completed for both the first and the second survey. Firstly, a descriptive analysis was performed for sociodemographic variables. Secondly, a comparative analysis was carried out comprising scales measured, using Chi-squared. Afterwards, T0 and T1 were compared using the Wilcoxon test, searching for possible associations between the scales results and the sociodemographic variables sex and education level. All statistic calculations were made using IBM SPSS Statistics 23.0.

Results

185 people were offered entering the programme, and 82 accepted taking part, but only 78 finished it. During the study there were 14 withdrawals, and alleged reasons were own illness (4), family issues (4) and others (6). These participants were also contacted to complete the intention-to-treat analysis. Most of the participants were women (74.4%), and mean age was 65.7 years old for women and 69.9 for men. The education level was low in 62.3% of women and in 61.9% of men, and more than 95% of the sample was retired. Women lived mostly in rural areas (57.4%), whereas men lived in urban areas (71.4%), and

both groups lived alone in a similar percentage: 22.4%. Regarding scales measurements, statistically significant differences were found between women and men in health-related quality of life (anxiety/depression item) and in perceived health status ($p \leq 0.05$). Comparing T0 and T1, statistically significant improvements were observed for self-esteem and health-related quality of life in women ($p \leq 0.05$), and for perceived health status in both sexes ($p \leq 0.05$).

Qualitative analysis

The qualitative analysis was performed by personal interviews. They were carried out in one of the PHC located in València/Valencia in April 2018.

Participants were chosen by the PHC coordination among all health staff and patients included in the programme. A total of 7 people accepted to take part in the evaluation: 3 physicians, 1 nurse, and 3 patients. The physicians and the nurse were women aged 35-55 years old, and the patients were 2 women and 1 man, all over 65 years old and retired.

The evaluation was based on semistructured interviews performed individually at the PHC, as it was a familiar place for the participants. They were asked about their perception of the activities and attendance, experience when prescribing and aspects to improve, staff-patient interaction and identified barriers or opportunities in health assets prescribing. Transcriptions of the interviews were registered by audio recording, and lasted for 20 to 45 minutes. All participants gave their informed consent to the study.

The data analysis was supported by the qualitative analysis software ATLAS.ti (8.2.30). Audio recordings were transcribed literally and all the addressed topics were identified and encoded.

Results

A positive general opinion was observed among patients and professionals. Patients considered that this strategy impelled them to increase their PA, and it was pointed out that this practice could even come to replace drug therapy at some level. Nevertheless, patients believed that for health professionals it is easier to continue to prescribe drugs, as PA prescription takes longer to be explained, and also that the elderly finds more difficult to change their habits and therefore the programme should start at younger ages. Professionals considered that this programme is a positive and handy resource, although it will take long to start to show all its benefits. Furthermore, they agreed that the programme could lead to a decrease in drug usage. However, some of them also experienced higher withdrawal rates than expected, due to lack of time, as expressed by their patients.

Regarding the advantages of the programme, health professionals were aware of the evidence available showing physical and psychological benefits. Patients also considered the proposed activities to be beneficial, although when practising some of them, like walks, they would report psychological improvements, but not physical. They also acknowledged its value for strengthening social bonds.

For health professionals, this programme represents an opportunity to reduce drug expenses and at the same time pharmacological iatrogenicity due to drugs interactions. On the other hand, they identified mainly two barriers: the time available for each patient and the technical issues. They also related both barriers to a lack of founding for primary care in comparison to specialised care. Patients pointed out a lack of awareness of PA benefits within health professionals and in some cases a low implication in the programme due to few incentives and low institutional support. They would also try to make space for more ludic activities in order to improve socialisation.

* Both analysis are in process to be published in a scientific journal.