Intervention on Diabetes Prevention and Screening in Vulnerable Populations of the Metropolitan Lisbon Area Portugal

Title in original language:

Projecto de Intervenção para a Prevenção e Rastreio da Diabetes em Populações Vulneráveis da Grande Lisboa

Which 'life stage (s)' for Diabetes and CVDs prevention targets the intervention?

Adulthood and Ageing. The chosen intervention was implemented among the 18+ years old population of several low socioeconomic neighbourhoods in the Metropolitan Lisbon area.

To which type of interventions does your example of good practice belong to?

Individual intervention. Individuals were targeted for their professional category (healthcare and social care professionals), for their socioeconomic status, and for their diabetes risk status.

What is the level of implementation of your example of good practice?

Regional. The intervention was implemented in the Lisbon Metropolitan Area (estimated general population: 2.8 million people). It was implemented between 2008 and 2014 (four years).

Short description of the intervention:

The intervention was developed to address the needs of vulnerable urban populations, with concomitant reduced access to healthcare, in regards to diabetes prevention and screening/diagnosis. It was implemented in collaboration with municipalities and local social partners of the Metropolitan Lisbon Area, between 2008 and 2014. Implemented activities included training sessions about diabetes prevention and management for both healthcare and social care professionals, sessions about diabetes prevention and healthy lifestyles promotion for the adult population, and diabetes risk screening sessions also for the general population.

Was the design of the intervention appropriate and built upon relevant data, theory, context, evidence, previous practice including pilot studies?

Intervention was based on previous knowledge on diabetes risk stratification. The main tool used, the FINDRISK questionnaire, was validated in several European countries.

Did the design thoroughly describe the practice in terms of purpose, SMART objectives, methods?

The objectives and intervention content were clearly drawn in the design phase but, due to implementation difficulties in the real-life scenario, recruitment and locations were chosen already during project roll-out.

How is this example of good practice funded?

Funding was provided by a national governmental agency (DGS, the General Directorate of Health), a private foundation (Ernesto Roma Foundation), and a private patient association (APDP – Diabetes Portugal).





What are the main aim and the main objectives of your example of good practice?

Main aim: Address the hypothesis that low socioeconomic populations are at an increased risk to develop diabetes. Main objectives: To promote health in vulnerable communities in the Lisbon Metropolitan Area; to promote equity in the access to healthcare; to implement diabetes prevention; to screen vulnerable populations for diabetes risk; to establish partnerships to consolidate the ability to act on vulnerable communities; to contribute for the actions advocated by the National Plan on Diabetes.

Please give a description of the problem the good practice example wants to tackle:

Especially with the recent economic crisis, low socioeconomic status population has increased and access to healthcare has worsened. By 2013, 27.5% of the general population were at risk of poverty or social exclusion. Likewise, economic restrictions are also reported to impinge negatively on nutritional choices and sedentary behaviours. This has clear impact on negative health outcomes, namely on diabetes incidence. Additional consequences include undiagnosed diabetes and complications.

Is your example of good practice embedded in a broader national/regional/ local policy or action plan?

Yes. The intervention is fully aligned to the National Plan for Diabetes.

Target group:

Adult population located at low socioeconomic neighbourhoods in the Lisbon Metropolitan Area. Also, healthcare and social care professionals that cover the mentioned neighbourhoods.

During implementation, did specific actions were taken to address the equity dimensions?

Yes. Actions were articulated with municipalities and partners in Lisboa, Amadora, Loures, Odivelas, Oeiras and Sintra, to identify areas with low socioeconomic status and lower access to healthcare services.

In design, did relevant dimensions of equity were adequately taken into consideration and targeted?

Yes, as stated above.

Which vulnerable social groups were targeted?

Low socioeconomic status adults. Migrants were also specifically targeted.

Did the intervention have a comprehensive approach to health promotion addressing all relevant determinants and using different strategies?

Yes. The intervention targeted both at-risk adults and healthcare and social care professionals.

Was an effective partnership in place?

Yes, partnerships were established with municipalities, healthcare providers, and social associations.

Was the intervention aligned with a policy plan at the local, national, institutional and international level?

Yes, it was aligned with the National Plan for Diabetes. Likewise, it was aligned with Ernesto Roma Foundation and APDP – Diabetes Portugal stated institutional missions.

Were potential burdens, including harm, of the intervention for the target population addressed?





Yes, with the exception of people identified at-risk of diabetes being invited for further voluntary screening, namely by performing an OGTT (oral glucose tolerance test), at the APDP clinic, which is located in downtown Lisbon, distant to some of the intervention areas. Travel expenses could not be covered by the project, so had to be incurred by the participants.

Were the intervention's objectives and strategy transparent to the target population and stakeholders involved?

Yes. Information was disseminated in oral and written form.

Did the evaluation results achieve the stated goals and objectives?

It was concluded that initial estimates were too ambitious in terms of recruitment of participants.

Did the intervention a defined and appropriate evaluation framework assessing structure, processes and outcomes?

Yes, information gathered through questionnaires was used to streamline processes. Cost/outcome studies were not performed.

Did the intervention have any information /monitoring systems in place to regularly deliver data aligned with evaluation and reporting needs?

Yes, reporting was performed each 6 months to the funding body.

Who did the evaluation?

An internal party (representatives of the intervention, own organisation)

Specifically, what has been measured / evaluated?

Process evaluation: respondents and participants in the training/education sessions. Basic analysis of statistics. Evaluation of the impacts/ outcome: Diabetes risk profile distribution and referral acceptance of people identified as of high-risk. Using FINDRISK questionnaire to the vulnerable population and performing OGTT (oral glucose tolerance test) to people identified as at high-risk.

What are the main results/conclusions/recommendations from the evaluation?

While the distribution of diabetes risk assessment in the studied low socioeconomic population was similar to that observed in the general population, the high-risk profile was shifted to a lower age. This supports the notion that diabetes incidence happens earlier in this vulnerable population.

Is the evaluation report available?

Yes, but only in Portuguese. "Projecto de intervenção para a prevenção e rastreio da diabetes" (2014) Ed. Fundação Ernesto Roma.

Who implemented the intervention?

The intervention was implemented by a team of nutritionists and diabetes educators from the Ernesto Roma Foundation. Support for the OGTT was given by healthcare personnel at APDP.

What core activities are/have been implemented?





For the general population, were implemented actions of diabetes risk screening and diabetes prevention education. People at risk were further invited to participate in screening for diabetes diagnosis. Training sessions were implemented for healthcare and social care professionals.

Did the intervention achieve meaningful participation among the intended target population?

Yes, although participation was lower than initially anticipated.

Was the target population/s defined on the basis of needs assessment including strengths and other characteristics?

Yes, the target populations were chosen based on previous needs assessment conducted by questionnaires to professionals and national epidemiological studies.

Was the engagement of intermediaries/multipliers used to promote the meaningful participation of the target population?

Yes, population participation was promoted through associations that develop assistential work within the targeted communities.

Is there a broad support for the intervention amongst those who implement it?

Yes, feedback from the partners was positive. And several partners maintained collaboration in subsequent projects regarding diabetes prevention.

Is there a broad support for the intervention amongst the intended target populations?

Yes, the target population expressed appreciation for the project objectives and actions.

Did the intervention include an adequate estimation of the human resources, material and budget requirements in clear relation with committed tasks?

Yes, this was fully submitted before intervention to obtain approval and funding.

Were sources of funding specified in regards to stability and commitment?

Yes. Funding was provided by a governmental agency (DGS). Additional funding was provided by Ernesto Roma Foundation and APDP, in accordance with their stated institutional missions.

Were organisational structures clearly defined and described?

Yes. There existed a dedicated core team that assured actions development and institutional communication within the partnership, as well as externally.

Is the potential impact on the population targeted assessed (if scaled up)?

Yes, the potential to detect undiagnosed diabetes and at-risk individuals was assessed and validated through the implementation of the FINDRISK and the OGTT.

Are there specific knowledge transfer strategies in place (evidence into practice)?

Yes, the intervention demonstrated locally several assumptions for the target population. It also revealed barriers and facilitators for the scale-up of diabetes prevention actions.





Is there available an analysis of requirements for eventual scaling up such as foreseen barriers and facilitators?

No, published materials only include the description of the model to be replicated.

What were, in your opinion, the pre-conditions for success? Were there any facilitating factors?

Conditions for success included that the targeted population had lower access to healthcare and a preoccupation regarding diabetes, and hence valued the intervention. The fact that it was free of charge and conducted through a mobile unit, going directly to the communities, was also highly valued. The involvement of DGS and APDP, national reference institutions in diabetes care, was likewise a condition for success.

What were, in your opinion, the main lessons to be learned?

Several lessons were learned from this intervention, especially those related to streamlining processes (the need for a detailed needs and barriers assessment to provide an adequate estimate of participants; the prior engagement of partners with direct intervention in the field, the development of strategies to engage healthy participants who are less sensitive to health issues). Also the conclusion that, in these interventions, all services must be deployable within the target community.

Web page related to the intervention:

http://fundacaoernestoroma.org/projecto-de-prevencao-e-rastreio-da-diabetes-em-bairros-vulneraveis-de-lisboa

Other relevant documents:

Booklet "Projecto de intervenção para a prevenção e rastreio da diabetes" (2014) Ed. Fundação Ernesto Roma.

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