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Commentary

Advances in shared decision-making for breast cancer screening in Spain

María José Hernández-Leal[1,2,3], María José Pérez-Lacasta[4,5], Misericordia Carles-Lavila[4,5,6,*]

[1]Faculty of Nursing, Universidad de Navarra, Pamplona, Spain

[2]PhD Program in Medical Science, Universidad de La Frontera. Temuco, Chile

[3]Millennium Nucleus on Socio-medicine. Santiago, Chile

[4]Department of Economics, University Rovira i Virgili. Reus, Spain

[5]Research Group on Statistical and Economic Analysis in Health (GRAEES), Reus, Spain

[6]Research Centre on Economics and Sustainability (ECO-SOS), Reus, Spain

*Author for correspondence:
Email: misericordia.carles@urv.cat

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Abstract

One of the most recent goals of health programmes in many countries is developing a person-centred healthcare model; however, strategies to implement it are still scarce, especially in health contexts such as preventive medicine. In the context of screening programmes, Shared Decision Making (SDM) can be a good alternative. Research has been carried out in Spain to understand both the local and international situation through systematic reviews and initiatives ranging from: the creation of Decision Aid (DA) support tools; the measuring of their effects on users' knowledge of the screening risks and benefits; the writing of manuals for healthcare professionals; the assessment of the patient's satisfaction in this type of relationship with the healthcare professional and, the efficiency of including SDM in a new way of conducting the screening programme. Nevertheless, efforts have not ensured yet its applicability as a routine practice in the clinical encounter and therefore, innovations and studies are still being conducted to make it real.

Keywords: Shared Decision-making, Breast cancer screening, Spain

Introduction

Shared Decision-making (SDM) is understood as a model of healthcare professional-patient relationship that enables deliberation through a horizontal interaction, without hierarchies, in which both actors are recognised as experts. On the one hand, the patient knows his or her life experiences and expectations, while the healthcare professional is an expert on scientific evidence, therapeutic options, their risks, and benefits [1-3].

The Law on Patient Autonomy, Healthcare Documentation and Information-related Rights and Obligations (41/2002) [4] incorporated the principles of the Oviedo Convention on Human Rights and Biomedicine into the Spanish legislation [5] and regulates matters such as the right to health information, informed consent, the patient's right to autonomy or access to their health-related documentation. It also supports the health system's commitment to develop a person-centred medicine and healthcare system [6], thus giving more relevance to the SDM model. SDM is not limited to specific contexts, but it can be applied to either health or illness contexts. Initial investigations focused on complex decisions - such as oncologic treatment -, but new approaches have broadened the scope of applicability to other contexts- such as those of patients with chronic diseases -, or in preventive ones - such as screening programmes [1]. However, studies of SDM in screening are scarce, in particular because the extent to which SDM is applied in this kind of scenarios is unknown [7].

Following a study published in *The Lancet* journal, in 2000, in which the balance of risks and benefits of breast cancer screening by mammography is analysed [8], in 2014, Sala et al. considered the SDM for breast cancer screening [9], and in 2018 Coll-Benejam et al. reaffirmed it and recommended SDM in cases of uncertainty [10]. In 2021 the Systematic Review (SR) by Hernández-Leal et al. found only 8 studies on this topic, most of which were on screening for cancer early detection and mainly developed in the United States, compared to Europe; yet, none in Spain [11].

Types of Studies and Research Conducted

The Progress of SDM has been recently made in some aspects on its application in Spain within the context of screening [12]. Thus, for example, the InforMa project first conducted a Systematic Review (SR) with meta-analysis, which concludes that DA increases both informed decision-making and the knowledge regarding risks and benefits, while its use decreases confidence in the decision and intention to undergo a mammography [13]. Also, in 2017 a qualitative analysis group, focused on women and healthcare professionals, assessed the relevance of a DA created by the research group in terms of its acceptability and feasibility confirming, this way, women's positive perception to receive information about the benefits and adverse effects of breast cancer screening [14]. Pérez-Lacasta et al. developed the first Randomised Clinical Trial for Spain which evaluated the effect of informing about the benefits and harms of breast cancer screening through the DA already conducted in the previous study, in contrast to a generic screening leaflet, and whose results showed that the DA did not vary the intention to participate in the screening [15,16].

Using the same DA, Pons-Rodriguez et al. observed a greater increase of knowledge among women with a high educational level, compared to those with a lower one. Among those women who went through the intervention, the informed choice was almost three times superior for those with a higher educational level. No differences were observed related to educational levels in the intervention and control groups in terms of decisional conflict, decisional confidence, anxiety and concern about breast cancer [17]. Due to its good results, the Ottawa Hospital Research Institute has incorporated into the official repository and thus make it available to the public [18].

The results obtained by Petrova et al. went in the same direction. They found in a randomised study that visual aid to deliver information, in contrast to a data table or just a text, improved women's understanding of both risks and benefits of the screening, and therefore, this also led to the preference for a shared decision-making model and to a better decision making [19].

In addition, the DECIDO project [20], which seeks to implement a risk-based screening model for each woman through Personalized Medicine instead of the current age-based uniform screening, has reported among its findings that SDM is a necessary element to develop more efficient, personalised models [21,22].

On the basis of implementing Patient-Centred Healthcare, a relevant research objective should be understanding women's satisfaction with a SDM process. Methodologies related to elicitation of stated preferences make it possible to determine the willingness to pay for the implementation of this procedure and subsequently to develop the economic evaluation between models that include, or not, the SDM to test its efficiency. With these premises, some research groups have initiated new studies in this field, for example, a study with the Discrete Choice Experiment methodology that seeks to determine the value women attach to the different attributes of a SDM model; the most significant being the person who makes the decision, preferring it to be made on her own or with a healthcare professional [23].

On the other hand, the professionals' perspective on Shared Decision Making has been, up to now, scarcely analysed. The article recently published by Hernández-Leal etal. in 2022, which draws up a manual to help healthcare professionals in the application of SDM in breast cancer screening [11], allows a further reflection on the advances made in Spain towards Patient-Centred Healthcare focusing on SDM. The manual "*The Participations of Health Professional in Shared Decision-making on breast cancer screening*" aims at making the healthcare professionals more familiar with the SDM model, and thus help them implement it [24]. However, its effectiveness in implementing a SDM process has not been proven yet. Despite this, it is currently used as a reference by the Catalan Agency for Health Quality and Assessment (AQUAs) so as to create a methodological guide and facilitate the incorporation of this type of manuals into other health decisions, in which DA implementation turns complex due to healthcare professionals' lack of training.

It is clear that incorporating DA into clinical guidelines is one of the strategies that could facilitate its implementation [25]. In the same way, the SR by Canelo-Aybar C et al. seeks to make a recommendation at a European level regarding the risks and benefits of breast cancer screening and concluding that mammography for women aged between 50-69 reduces the risk of mortality considerably, whereas at other ages, at which the benefits could not outweigh the risk, SDM becomes one way to help decision-making [26]. In this regard, the SR developed by Martín-Díaz et al. also recommends SDM in Primary Health Care for specific cases; in scenarios of high uncertainty as for instance, those in which there is persistent non-cyclic and localised mastalgia in over-35-year-old women, so as to decide on the therapeutic course and refer them to a specialized breast unit [27]. On the other hand, studies are underway on whether discussion groups among women, without health professionals, facilitate the decision preparation in relation to breast cancer screening [28].

Finally, drawing on Perestelo-Pérez et al.'s conclusions, SDM is poorly developed within the Spanish Public Health System, partly due to the decentralised public health decision-making by Autonomous Communities [29] and, consequently, advances are related to regional strategies implementation. Thus, in the different Autonomous Communities of Spain, an Informed Decision-making model is generally predominant, i.e, a unidirectional transfer of information without any participation of women and without any individualisation of the information, in contrast to what happens in countries such as France, Switzerland or the United Kingdom, where SDM is contemplated or already used [30,31].

Therefore, next advances to be proposed are: firstly, finding out whether discussion groups among women facilitate the preparation for SDM related to breast cancer screening; secondly, determining the effectiveness and usefulness of the manual already developed for training healthcare professionals in the implementation of SDM in breast cancer screening; and thirdly, determining the cost-benefit balance of SDM in a screening programme based on women's perception of how beneficial this relationship with healthcare professionals is.

Conclusion Remarks

Shared Decision Making is a model which facilitates a person-centred care. Despite the already published favourable research results, its implementation is still a pending issue, even more so in the breast cancer screening programme, in which women seem to have no decision options. In Spain, interest in MDS within the context of breast cancer screening arose about a decade ago. This is

why progress has been made in order to know the reality through Systematic Reviews; DAs have been developed for women so as to measure their effects on knowledge, their interest and attitude towards the screening; and support materials have been recently developed for healthcare professionals so as to determine their perspective, expectations, and predisposition for a possible implementation. The aforementioned shows that progress has been made, even though, it is still scarce and continuing the research on SDM and generating advances in more participatory care remains a challenge.

Conflicts of Interest

The authors declare that there is no conflict of interest.

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Author Contributions Statement

María José Hernández-Leal, María José Pérez-Lacasta, and Misericòrdia Carles-Lavila: Conceptualization, Investigation, Project administration, Supervision, Visualization, Writing-original draft.

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