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Tailored care in frail patients with multimorbidity: future prospects

Personalizando la atención al paciente frágil con multimorbilidad: un camino de futuro

Javier González-Bueno[1,2], Joan Espaulella-Panicot[2,3]

[1]Department of Pharmacy, Hospital Universitari de Vic (Consorci Hospitalari de Vic), Vic (Barcelona), Spain. [2]Central Catalonia Chronicity Research Group (C[3]RG). Universitat de Vic/Universitat Central de Catalunya, Vic (Barcelona). Spain. [3]Department of Geriatrics, Hospital Universitari de Vic (Consorci Hospitalari de Vic) & Hospital Universitari de la Santa Creu (Fundació Hospital de la Santa Creu de Vic), Vic (Barcelona). Spain.

Author of correspondence
Javier González-Bueno
Servicio de Farmacia
Consorci Hospitalari de Vic.
c/ Francesc Pla el Vigatà, 1
08500 Vic (Barcelona). Spain.

Email:
javigbueno@gmail.com

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Progressive ageing of the population and the ensuing higher incidence of chronic conditions are two of the main challenges facing health systems. Against this background, multimorbidity becomes an important factor given its high prevalence in elderly patients and its association with higher levels of disability and frailty[1]. The latter results in increased vulnerability following stressful events and predisposes individuals to poor health outcomes. At the same time, polypharmacy in elderly patients tends to increase dramatically[2]. This is due not only to ageing as such, but also to the systematic application to frail patients with multimorbidity of the recommendations provided by clinical guidelines geared towards patients with single chronic conditions. These factors explain the particular vulnerability of these individuals to the negative effects of polypharmacy, including an increased exposure to potentially inappropriate prescribing, and ultimately, a higher risk of suffering medication-related adverse events and unplanned hospital admissions[3].

Tailored pharmacotherapy is possibly a prime example of individualized care in frail patients with multimorbidity. This could be achieved through a medication review, defined as a structured evaluation of patient's medicines with the aim of optimizing medicines use and improving health outcomes[4]. Medication review aims to fosters judicious prescribing practices, i.e., prescribing drugs for which there is a clear evidence-based indication, whose benefits outweigh their risks and which are well-tolerated and cost-effective[5]. With that goal in mind, several useful tools have been developed, among them the so-called explicit criteria, which are based on standard recommendations in the form of closed medication lists, and models or frameworks, which combine prior knowledge with a comprehensive geriatric assessment[6]. The complexity of medication review is therefore variable as it depends on whether the decision-making process includes clinical data and medication history, and whether it is sensitive to the patients' values and preferences[4]. The latter requires the ability to capture the patients' experience with respect to how their condition is being managed and their own level of expertise concerning their pharmacotherapy. This will help achieve the best possible outcomes with respect to a given therapeutic plan[7].

The availability of scientific evidence backing the use of medication optimization in frail patients with multimorbidity has increased exponentially in the last few years. At the same time, healthcare providers involved in the care of these patients have become increasingly aware of the importance of promoting their autonomy and shared decision-making as a requirement for personalizing their therapeutic plan.

This is how the term effective prescribing came about. Effective prescribing is the process by which a provider selects the best medication regimen for accomplishing clinical and patient-centered goals after weighing shared decision-making information. Effective prescribing also results in patient's understanding of how, when, and why the medication is to be taken[8]. Medication appropriateness and effective prescribing are both close but not interchangeable terms. The latest, which has been institutionally adopted by the Scottish Government[9], additionally considers discussion of solutions to patients' perceived barriers to obtaining and taking medications that are part of an agreed-upon treatment plan[10]. In this way, medication adherence and medication appropriateness are necessarily linked through effective prescribing.

Accordingly, prescriptions including drugs that patients reject or cannot be self-administered as prescribed should be considered potentially inappropriate[9]. Therefore, when performing a medication review, it is important to take into consideration patients' values and preferences, as well as their abilities, as those factors are as critical for decision-making as the patients' clinical and functional status, their life expectancy or their therapeutic goals. This requires switching our perspective from a disease-centered to a patient-centered.

How are we to embrace this new reality? Are the decision-making tools commonly applied to frail patients with multimorbidity fit for purpose?

In our opinion, frameworks that incorporate a comprehensive geriatric assessment should be the preferred choice[9,11], as they facilitate therapeutic harmonization on the basis of shared and individualized decision making.

Therapeutic harmonization is intended to strike a balance between the patient capacity, i.e. patients' ability to access and use care and to enact self-care, and their burden of treatment, defined as the workload of health care as well as its impact on patient functioning and well-being[12]. In this context, an imbalance caused by an overwhelming burden of treatment or a reduction in the patients' functional, cognitive and/or social capacity will entail a higher medication non-adherence risk and, ultimately, poorer health outcomes[13]. Tools are currently available to measure the burden of treatment of elderly patients with multimorbidity[13]. This information, together with that on patient's clinical characteristics, could in the future allow identification of patients who are particularly vulnerable to medication non-adherence and, therefore, more likely to benefit from strategies geared towards effective prescribing.

It is likewise essential to ensure that the strategies used to review patients' pharmacotherapy allow for shared decision making given the latter's multiple implications for the success of effective prescribing. On the one hand, consensual decision-making provides an additional benefit as it improves medication adherence by enhancing patient knowledge and patient satisfaction with treatment choices[14]. On the other hand, shared decision-making is a critical ingredient for any intervention that considers drug deprescribing as the patients' attitude towards a drug deprescribing will not be necessarily related to whether the drug represents a potentially inappropriate medication or not[15].

Moreover, the above-mentioned strategies should not make us overlook the role of the patients' main caregiver, especially considering how dependent patients with multimorbidity tend to be on such persons for managing their medications at home. In addition, caregivers may exert a direct influence on medication adherence as they apply their capacities, values and beliefs to managing the medications of the patients they take care of.

We are therefore at a time where we have gained a significant understanding and experience of how to optimize pharmacotherapy in frail patients with multimorbidity and possess a clear idea of what should be the road forward. Aside from the terms we may be using in the future, there is a clear need to integrate into our routine clinical practice such approaches as may help us achieve the goal of a truly patient-centered care. We cannot be oblivious to the fact, however, that effective implementation of such strategies will entail a challenge as they must involve a transformation of the way we do our clinical practice. Achieving this goal will allow an effective integration of clinical hospital pharmacists into multidisciplinary care teams and a closer alignment of our goals with those that really matter to our patients.

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