

In search for the right way in medical care of older adults: navigating between geriatrician and other specialties on the sea of multimorbidity

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We read with great interest the study by Piotrowicz et al¹ evaluating the patterns of multimorbidity in patients included to the PolSenior study. PolSenior is an exceptional source of high-quality data providing important and multidimensional information on several aspects of life of older adults in Poland, including detailed analysis of health-related problems. The reports on burden of several diseases prevalent in this population were published in the series of papers and now the authors aimed to analyze the problem of multimorbidity.

As mentioned by the authors,¹ there is an ongoing discussion concerning the model of geriatric care in search for the optimal way between specialized care focused on particular diseases (disease-centered care) and a more general approach offered by general practitioners and geriatricians (patient-centered approach). Our “sibling experience” may shed some non-evidence-based but practice-based light on true proportions: one of us (a nephrologist) almost every day seeks advice from a geriatrician, whereas the other (a geriatrician) needs consultation and help from a nephrologist only a few times per year.

In our opinion, the study by Piotrowicz et al¹ may aid in finding better ways of care for particular patients by using approaches based on patterns of multimorbidity or clusters of multimorbidity. It seems that the authors identified 2 distinct types of such clusters, either homogenous or heterogenous in nature. For example, in each age group, the mental or cognitive impairment multimorbidity patterns are quite homogenous and should direct the patient care towards geriatrics, sometimes in cooperation with a psychiatrist/a

neurologist. Cardiovascular or cardiometabolic patterns (with hypertension, heart failure, obesity, and diabetes) are also rather homogenous and might allow the general practitioner to provide high-quality care with support from other specialists only on initial diagnosis and in case of a worsening of a disease with relatively stable course (although from a geriatrician’s perspective, general practitioners tend to over-refer seniors to specialists instead of offering the holistic approach). The same could apply to diseases clustered around chronic kidney disease (CKD). However, these clusters and patterns will still result in some patients (eg, needing oncological or ophthalmological treatment) being directed to highly specialized care.

On the other hand, dealing with multimorbidity, even homogenous, particularly among the “oldest old” might be a challenge for physicians when there is a need to establish the new goals of care and to move from curative to palliative / quality-of-life-centered approach. Care focused on goals identified by patients and families (patient goals-directed care) is a complex process in which the collaboration of family doctors and “organ” specialists with a geriatrician / palliative care specialist cannot be overestimated. Very often, life prolongation becomes less important for patients and their families as compared with maintaining the functional status, well-being, and freedom from burdensome symptoms, such as pain or constipation, but also from burdensome diagnostic or therapeutic procedures.² Multimorbidity, even when initially categorized to the homogenous pattern, usually leads to the development of frailty syndrome. Diagnosis and then

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prevention of progression of frailty is a multidirectional process needing collaboration of many specialists, mostly geriatricians and physiatrists.

Understanding and recognizing multimorbidity also help in prognosis assessment of a chronically ill elderly person and enable initiation of a shared decision making process. Every doctor may use practical tools / indexes to assess the prognosis of the patient—many of them are based on the comorbidity index and frailty assessment (for example, the Multidimensional Prognostic Index).^{3,4}

We are afraid that even if we classified a patient into one of the multimorbidity patterns, the common complications would develop (for example renal or gastrointestinal adverse events of treatment) which would mandate immediate changes in the previously designed care plan. The same applies to geriatric giants (falls, delirium, urinary incontinence) as well as chronic pain, which were not incorporated in the patterns / clusters identified in the study but might influence the course of other diseases (they were not analyzed since they are symptoms, not diagnoses). But, as highlighted in the study by Piotrowicz et al¹ and which is of paramount importance for every specialist who treats elderly patients, cognitive impairment (another geriatric giant) usually coexists with other diseases. All practitioners should be aware that dementia may influence the compliance with the treatment and impair the understanding of the physician's instructions.

Since one of us is a nephrologist, we would like to acknowledge the role of CKD as a contributor to several disease clusters and as an integrator of multimorbidity. As mentioned by the authors,¹ according to their design, the assessment of causality is not possible, but given the example of CKD and cardiovascular disease, probably not always necessary. Although the precise diagnosis of underlying primary or secondary nephropathy as a cause of CKD is essential in some patients to propose a specific treatment, this is probably not so important in older adults with cardiorenal syndrome. Cardiovascular disease and CKD inseparably interact with each other and they should be addressed as a complex pathology rather than 2 or 3 distinct diseases. The study by Piotrowicz et al¹ rightly points to the need of such an integrative approach.

The undeniable advantage of presented data is building the knowledge on the complexity of treatment of elderly patients among different specialties. As the authors state, multimorbidity increases the risk of both over- and undertreatment. Moreover, it is inextricably linked with polypharmacy—treatment-related burden when patients must adhere to multiple recommendations and treatment-related harm when recommendations are conflicting.

On the other hand, it is impressive that despite these complexities, we can identify and implement drugs with multipotential effects, particularly in some patterns of multimorbidity

presented by Piotrowicz et al.¹ Such hope may stem from recent data on drugs developed to treat diabetes that now cross the borders and successfully enter lands distant from the original disease. Although both scientists and practitioners should always doubt in apparently revolutionary therapies, the drugs that we mean, that is, sodium-glucose cotransporter 2 inhibitors and glucagon-like peptide 1 (GLP1) receptor agonists, leave little room for scepticism. Out of the diseases evaluated by Piotrowicz et al,¹ the mentioned drugs have been demonstrated to be effective in the treatment (or at least in improving the control) or prevention of the following diseases: hypertension, metabolic diseases / diabetes, obesity, arrhythmia, ischemic heart disease, heart failure, anemia, kidney disease, and stroke (9 out of 17, with different level of evidence for each disease).^{5,6} Some of them were also demonstrated to decrease the risk of death, and—which is of paramount importance from the geriatric perspective—their efficacy seems to increase with age.⁷⁻¹⁰ There is no reason to suspect that the mentioned drugs may harm patients who have any other disease assessed in the study by Piotrowska et al¹ (although some minor warning signs should be acknowledged, such as possible worsening of diabetic retinopathy with the use of GLP1 receptor agonists). Strong experimental background mandates the initiation of prospective randomized trials evaluating mentioned drugs also in patients with cognitive impairment, depression and Parkinson disease.¹¹⁻¹⁵ We believe sodium-glucose cotransporter 2 inhibitors and GLP1 receptor agonists will pave a new path to control several diseases with fewer medications, to limit the risks of polypharmacotherapy, and to improve quality of care in older adults.

The authors mentioned certain limitations of their study, including the possibility to overdiagnose or underdiagnose particular index diseases. Despite these limitations, the study provides very important information on multimorbidity in older adults. As we mentioned, some domains of morbidity that significantly impact health status of older adults, such as, for example, osteoarthritis, chronic pain, and frailty, were not included in the analysis (although we fully understand the reasons of this omission). In our opinion, another missing factor is burden of multimorbidity in relation to the place of residence and the socioeconomic status of older adults included in the analysis. It seems possible to extract these data from the database: several aspects of health and disease analyzed in the PolSenior project in relation to the socioeconomic status were already published. Both of us have experience in working in a metropolitan city with a population of almost 800 000, a medium-sized city with 170 000 citizens, and a provincial town with 10 000 inhabitants (where one of us runs the geriatric practice and long-term care facility). From our perspective, we can see the differences (both advantages and disadvantages) of living in these diverse

environments—it would be interesting to obtain scientific data on how multimorbidity may depend on socioeconomic factors.

ARTICLE INFORMATION

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