Reply Letter – Polypharmacy is a determinant of hospitalization in Parkinson's disease

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Dear Author,

We would like to thank Chu et al¹ for their insightful consideration about our paper². Polypharmacy plays a crucial role in older patients, especially if hospitalized or suffering from multimorbidity^{3,4} as in Parkinson's disease².

Enrolment of larger and complex populations always represents a desirable aim of any observational study; however, older patients with Parkinson's disease are characterized by early decline of functional ability and cognitive performance, which hinder a regular attendance to ambulatory visits, as well as their adherence to any long-term follow-up program^{5,6}. The 28% hospitalization rate of our community-dwelling patients reflects the overall frailty of these subjects. The establishment of an age-matched sample of subjects would need a formal hypothesis; in general, as the age-related alterations in the brain dopamine system form a continuum with those of Parkinsonism, the search for risk factor for Parkinson's disease in advanced age would require excessively large samples⁵.

Interestingly, in a multicenter study has been reported that polypharmacy, highly prevalent among older NH residents, over 1 year is associated with worsening cognitive function but not functional decline⁴. On the other hand, polypharmacy is often associated not only with co-morbidity but also with specific symptoms, such as pain, dyspnea and falls⁷. Analyses on big data of representative cohorts will probably allow to define risk factors, as well as protective lifestyle habits and drug treatments for Parkinson's disease in older populations⁸. Moreover, the management of the continuity of care is fundamental especially in chronic or complex clinical diseases, such as Parkinson's disease⁹.

On these bases, is precious the suggestion of Chu et al¹ about the necessity of further studies about polymedication on larger sample of hospitalized patients.

Conflict of Interest

The Authors declare that they have no conflict of interests.

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