## SOCIAL NETWORKS AND INFLUENCERS AS THE MAIN SOURCE OF "SCIENTIFIC" INFORMATION ON ENDOMETRIOSIS: A MEDICAL CLASS HARAKIRI?

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4 Sir,

Thurnherr and colleagues (2024) are to be commended for their informative and useful report
describing the results of an online survey on hormonal therapies for endometriosis conducted on a
large international sample of patients. The authors conclude that "*endocrine endometriosis therapies are associated with negative mental images and emotions and there seems to be a pre- therapeutic information deficit on the part of physicians*".

In our opinion, it cannot be excluded that the reported findings are partly due to the ominous combination of limited awareness and knowledge of the condition among physicians on the one hand (Ballard *et al.*, 2006), and the long-standing scientific polarisation between advocates of medical versus surgical treatments on the other (Vercellini *et al.*, 2018), resulting in potentially contradictory information from experts.

In particular, the adverse effects on mental health associated with the use of oestrogenprogestogen combinations and progestogen monotherapies are the subject of an ongoing debate, given the inconsistencies of the available evidence. The risk of depression is generally concentrated in specific subpopulations, such as adolescents and patients with a previous diagnosis of psychiatric disorders (McCloskey *et al.*, 2021; Kraft *et al.*, 2023). Therefore, the issue of past or current depression should be systematically investigated when taking history and before prescribing hormonal treatments (Martell *et al.*, 2023).

More in general, the impact of first-line endocrine therapies for endometriosis should be addressed within the context of the management of a chronic inflammatory disorder with potential severe consequences. Thus, the overall balance between benefits and harms may be different compared with that in healthy women "merely" seeking contraception. This should also be made clear to patients. Moreover, the information provided during counselling should take into account not only the risk of side effects affecting mental health but also the possibility that mental health
and sexual functioning may improve as a consequence of pain reduction and of ameliorated overall
quality of life associated with endocrine therapies (Barbàra *et al.*, 2021).

Finally, we wonder whether the participants in this survey (Thurnherr *et al.*, 2024) could have effectively discriminated between different classes of endocrine treatments, since side effects' frequency and severity vary considerably among medications. Throwing all drugs into one big pot may have led to an overestimation of potential adverse events (e.g., the popular concept of "pharmacologically-induced menopause" when using GnRH analogues).

The potential misinterpretation of this excellent article by enthusiastic surgeons to further 35 36 discourage patients from using medical treatments would be a bad service to women and public 37 health systems. We should all focus, together with nation-based patient associations, on 38 disseminating complete and impartial evidence-based information on what is currently the only 39 medical modality to control endometriosis and prevent its progression or its post-excisional 40 recurrences. Shared decision-making and patient-centred medicine are incompatible with 41 disinformation. Empowering women also implies that the medical class should be responsible for 42 preventing its complete replacement by social networks and influencers as the main source of information (Lee *et al.*, 2022; Wu *et al.*, 2023; Adler *et al.*, 2024; Isaac *et al.*, 2024). Only by 43 44 dedicating time to the medical encounter, giving voice to patients' fears and expectations, 45 respecting their priorities and preferences, and adhering to international guidelines and recommendations (e.g., Becker et al., 2022) could this be obtained (Cappella and Street, 2024). 46 47 Well-informed clinicians have a moral duty to explain to patients that, when correctly prescribed in 48 individuals without major contraindications, first-line hormonal medications are safe, effective and 49 inexpensive. This allows equitable access to care, which is particularly important in middle- and 50 low-income countries. As the authors have pointed out, non-hormonal treatments are a long way 51 off. In the meantime, we plead for more research on tolerability and customisation of available 52 therapies.

## 53 **Conflict of interests:**

54 P.V. is a member of the Editorial Board of the Journal of Obstetrics and Gynaecology Canada and of the International Editorial Board of Acta Obstetricia et Gynecologica Scandinavica; has received 55 56 royalties from Wolters Kluwer for chapters on endometriosis management in the clinical decision support resource UpToDate; and maintains both a public and private gynaecological practice. 57 58 All other authors declare no conflict of interest. 59 60 Martina Piccini, M.D.\*1 ORCID 0009-0001-5328-6696 martina.piccini@unimi.it Giulia Emily Cetera, M.D.<sup>1,2</sup> ORCID 0000-0001-8434-6284 61 Anna Nasini, M.D.<sup>1</sup> 62 ORCID 0009-0003-0625-3447 Paolo Vercellini, M.D.<sup>1,2</sup> ORCID 0000-0003-4195-0996 63 64 65 <sup>1</sup>Academic Centre for Research on Adenomyosis and Endometriosis, Department of Clinical Sciences and Community Health, Università degli Studi, Via Commenda 12, 20122 Milano, Italy 66 67 <sup>2</sup>Fondazione IRCCS Ca' Granda Ospedale Maggiore Policlinico, Via Commenda 12, 20122 68 Milano, Italy 69 70 \*Correspondence: Department of Clinical Sciences and Community Health, Università degli Studi 71 Via Commenda 12, 20122 Milano, Italy. Electronic address: martina.piccini@unimi.it. ORCID: 72 https://orcid.org/0009-0000-5328-6696. 73 74 Additional ORCID iDs: 75 Giulia Emily Cetera: ORCID 0000-0001-8434-6284 76 Anna Nasini: ORCID 0009-0003-0625-3447 77 Paolo Vercellini: ORCID 0000-0003-4195-0996 78

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