

Authors' reply: Communicating evidence-based practice in menopause

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We appreciate the concerns raised by Dr Prior in her correspondence on our Primer (Menopause. *Nat. Rev. Dis. Primers* **1**, 15004 (2015))¹, which raised some interesting points (Perimenopause and menopause as oestrogen deficiency while ignoring progesterone. *Nat. Rev. Dis. Primers* <http://dx.doi.org/10.1038/nrdp.2015.31> (2015))².

The selection of menopause as a topic in this journal highlights the importance of this life phase for women. We were required to format our article according to specific journal guidelines, but this should not be interpreted as 'medicalizing menopause'. Rather, our enthusiasm to communicate evidence-based practice to the readership counterbalanced the concern about casting menopause as a disease state. It is difficult to compose a review that encompasses such a large part of a woman's life and that addresses the short-term and chronic conditions arising from menopause, while highlighting the nuances between the menopausal transition and the postmenopausal years.

We note the contribution that Dr Prior has made to the literature regarding treatment of vasomotor symptoms with progesterone³. However, we do not agree that oestrogen has never been shown to reduce vasomotor symptoms

in perimenopausal women. First, the many trials of oestrogen treatment of hot flushes have adhered to the US FDA guidance⁴, which recommends that 'only postmenopausal women be included'. However, the inclusion criterion of 6 months of amenorrhoea accompanied by follicle-stimulating hormone levels of >40 mIU per ml almost certainly includes women who are perimenopausal. Second, studies on hormonal control of hot flushes in perimenopausal women that have used oestrogen in combination with progestin have demonstrated efficacy against hot flushes specifically in perimenopausal women^{5,6}. Low-dose transdermal oestradiol has also been shown to be effective in combination with a levonorgestrel intrauterine system in controlling hot flushes in perimenopausal women^{7,8}.

Finally, we do not agree with Dr Prior that the concept of oestrogen deficiency is 'out of date'. It may not be perfect, but it is the best explanation we currently have.

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Competing interests

S.R.D. has received honoraria from Abbott Pharmaceuticals and is an investigator for Trimel Pharmaceuticals and Lawley Pharmaceuticals; all other authors declare no competing interests.