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Title: Regionally-based medical practitioners may need support when prescribing exercise to pregnant women.

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I state that the contents are the authors' original work and that the paper has not been submitted for publication to another journal.

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8 Regionally-based medical practitioners may need support when prescribing exercise
9 to pregnant women.

10 **Introduction:** Physical activity (PA) undertaken in accordance with exercise during
11 pregnancy guidelines is associated with a variety of health benefits.¹ Despite these
12 health benefits, very few women are sufficiently active during pregnancy.¹
13 International research suggests that medical practitioners (MP) play a vital role in
14 assisting women to exercise during pregnancy, with exercise counselling by MPs
15 found to be effective and feasible in increasing PA levels in pregnant women.²

16 An increase in visits to MPs during pregnancy places MPs in a unique position to offer
17 consistent PA/exercise counselling and support.² Specifically, pregnant women see
18 their MP up to 11 times over the course of an uncomplicated pregnancy,² compared
19 to the general population who see their MP at least once a year.³ Furthermore, MP
20 advice is a powerful motivator to increase PA levels because of the MPs perceived
21 credibility and authority⁴, especially among pregnant women who may consider
22 pregnancy as the opportune time to implement healthy lifestyle changes. However,
23 previous research suggests MPs may not be promoting exercise in accordance with
24 recommended guidelines, or utilising screening tools to assist in the exercise
25 prescription process.

26 International research also suggests that MPs receive no formal training in exercise
27 prescription for pregnant women and that many MPs lack confidence in their
28 exercise counselling abilities and knowledge.² However, no study to date has

29 examined these factors in an Australian context. The importance of having MPs
30 provide PA/exercise advice is amplified in rural, remote and regional Australia where
31 PA levels are lowest, and access to specialist healthcare services, such as antenatal
32 care, is less accessible than in urban Australia.⁵ These factors place individuals living
33 in rural, regional and remote areas of Australia at increased health risk.⁵ Thus,
34 interventions that aim to increase PA through MP counselling are warranted. To
35 inform intervention development, insight into what MPs currently know about
36 exercise during pregnancy is needed. The current study aimed to examine the level of
37 awareness of exercise during pregnancy guidelines and associated screening tools,
38 training received, and degree of confidence in offering exercise prescription to
39 pregnant women in a sample of MPs based in Rockhampton, Australia. This study was
40 approved by the CQUniversity Human Research Ethics Committee (H13/06-123).

41 **Participants, Methods & Results: All GPs in Rockhampton (n=80-90) were invited to**
42 **participate in a survey** exploring level of awareness of exercise during pregnancy
43 guidelines and associated screening tools, what training MPs received in exercise
44 prescription for pregnant women, and MPs confidence in prescribing exercise to
45 pregnant women. **Of these, 50 responded (response rate 55-62%).** Most participants
46 were female (58%), aged 25-34yrs (40%) and practicing less than 5 years (40%).
47 Only 8% were familiar with exercise during pregnancy guidelines and none were
48 familiar with screening tools. Only 4% of MP's had received formal training in
49 exercise prescription while 42% were confident in providing exercise advice to
50 pregnant women. Results are further illustrated in Table 1.

51
52 **Comment:** The present findings suggest Rockhampton-based MPs in Australia have
53 insufficient awareness of exercise during pregnancy guidelines and associated
54 screening tools, receive very little formal training in prescribing exercise to pregnant
55 women and lack confidence in providing exercise prescription to pregnant women.
56 There are obvious advantages to having MPs offer exercise advice to pregnant
57 women, especially in a regional setting where access to specialist services may be
58 limited. To do this, MPs need to be equipped with the necessary training and ongoing
59 support to provide effective exercise prescription to pregnant women. Future studies

60 using nationally representative samples are needed to better inform both policy and
61 practice.

62

63 **KEY WORDS:** Physical activity, exercise, pregnancy, maternal health, primary care

64

65 **Conflicts of Interest**

66 None declared.

Reference List

1. Mudd L, Owe K, Mottola M, et al. Health benefits of physical activity during pregnancy: An international perspective. *Medicine and Science in Sports and Exercise*. 2012.
2. Joy E, Mottola M, Chambliss H. Integrating exercise is medicine into care of pregnant women. *Current Sports Medicine Reports*. 2013; 12: 245-7.
3. Australian Bureau of Statistics. Patient experiences in Australia: Summary of findings, 2011-12. Internet. 2014. [cited 2015 October]. ABS cat no, 4839.0]. Available from: <http://www.abs.gov.au>
4. Andersen R, Blair S, Cheskin L, et al. Encouraging patients to become more physically active: the physician's role. *Ann Intern Med*. 1997; 127: 395-400.
5. Dobson A, Byles J, Dolja-Gore X, et al. Rural, remote and regional differences in women's health: Findings from the Australian longitudinal study on women's health. Australian Government Department of Health and Ageing. 2011: 1-134.

Table 1. Training, awareness and confidence in providing exercise advice to pregnant women.

Question	Response n (%)	
	Yes	No
Have you received any formal training on exercise during pregnancy?	2 (4)	48 (96)*
Are you familiar with any exercise during pregnancy guidelines?	4 (8)	46 (92)*
Are you familiar with any screening tools that help to prescribe exercise among pregnant women?	0 (0)	50 (100)*
Are you confident in providing exercise advice to your pregnant patients?	21 (42)	29 (58)

* Significance (p<0.05)