

<u>Craig, P., Dundas, R., Leyland, A.</u>, and <u>Popham, F.</u> (2016) How successful was the English teenage pregnancy strategy? Response to Wellings K, Palmer MJ, Gear RS et al. Changes in conceptions in women younger than 18 years and the circumstances of young mothers in England in 2000-12: an observational study. <u>Lancet</u>, 388(10060), p. 2604. (doi:<u>10.1016/S0140-6736(16)32223-1</u>)

This is the author's final accepted version.

There may be differences between this version and the published version. You are advised to consult the publisher's version if you wish to cite from it.

http://eprints.gla.ac.uk/130395/

Deposited on: 20 October 2016

Elsevier Editorial System(tm) for The Lancet Manuscript Draft

Manuscript Number:

Title: How successful was the English teenage pregnancy strategy? Response to Wellings K, Palmer MJ, Gear RS et al. Changes in conceptions in women younger than 18 years and the circumstances of young mothers in England in 2000-12: an observational study. Lancet Published online: May 23, 2016

Article Type: Unsolicited Comment

Corresponding Author: Dr. Peter Craig, PhD

Corresponding Author's Institution: University of Glasgow

First Author: Peter Craig, PhD

Order of Authors: Peter Craig, PhD; Ruth Dundas, MSc; Alastair Leyland, PhD; Frank Popham, PhD

How successful was the English teenage pregnancy strategy: response to Wellings K, Palmer MJ, Gear RS et al. Changes in conceptions in women younger than 18 years and the circumstances of young mothers in England in 2000–12: an observational study. *Lancet* Published online: May 23, 2016

Peter Craig, PhD (corresponding author)

MRC/CSO Social and Public Health Sciences Unit, University of Glasgow

200 Renfield Street

Glasgow G2 3QB

Peter.craig@glasgow.ac.uk

0141 353 7559

Ruth Dundas, MSc

MRC/CSO Social and Public Health Sciences Unit, University of Glasgow

200 Renfield Street

Glasgow G2 3QB

Alastair Leyland, PhD

MRC/CSO Social and Public Health Sciences Unit, University of Glasgow

200 Renfield Street

Glasgow G2 3QB

Frank Popham, PhD

MRC/CSO Social and Public Health Sciences Unit, University of Glasgow

200 Renfield Street

Glasgow G2 3QB

Teenage pregnancies have fallen rapidly in England since 1998. The paper by Wellings and colleagues¹ and accompanying editorial² ascribe the fall to the English teenage pregnancy strategy published in 1999. Unlike the interim evaluation by the same authors,³ the paper draws no parallels with the other UK countries, but a comparison with trends in conceptions among 15-17 year olds elsewhere in the UK raises questions about how far the fall can be attributed to the English strategy (figure 1). Particularly notable is the sharp downturn after 2007 evident in all three countries. Comparable data on conceptions in Northern Ireland is unavailable, but births to teenage mothers show a similar sharp downturn after 2008.⁴

Figure 1 here

Why are the trends so similar across the UK? One possibility is that the countries had similar strategies. Sexual health strategies have indeed been introduced in each country (Wales in 2000, Northern Ireland in 2002 and Scotland in 2005)^{5,6} but there is no consistent relationship between the timing of their introduction and the subsequent decline in conception or birth rates, and it is not clear why strategies introduced over a seven-year period should produce a downturn in conception rates at much the same time in each country. Another possibility is that the English strategy affected conception rates elsewhere. Wellings and colleagues¹ show that higher levels of Local Implementation Grant funding for strategy-related activity, which was targeted according to teenage conception rates, was associated with faster rates of decline in more deprived English areas. This pattern is not consistent with the idea that the effects of the strategy were pervasive, rather than specific to the areas where effort was concentrated. Moreover this funding was not available in Scotland, where the same pattern of faster decline in more deprived areas is evident (figure 2). A more plausible explanation would be a common cause of decline across the UK, and hypotheses such as the wider availability and uptake of long acting reversible contraception (LARC) after 2005 are worth exploring.^{7,8}

Figure 2 here

Wellings and colleagues¹ draw attention to the difficulty of using observational data to disentangle the effects of policies from secular trends. One way of strengthening causal inference is to use a variety of natural experimental methods to identify impacts. The conclusion that the pattern of decline in teenage conceptions in England demonstrates the importance of 'long term, sustained multifaceted prevention strategies' would be much stronger if it took account of trends elsewhere through the inclusion of one or more controls. This is not a fine point of research methodology: it may be that the English success could have been achieved more efficiently. Many countries outside the UK, including New Zealand, Spain, Denmark and the US, have also seen rapid falls in births to teenage mothers after 2007,⁹ and the UK does not stand out in terms of success in reducing abortion rates among young women.¹⁰ Cross-national comparisons of policies and strategies would help to identify the specific elements that are driving change and should therefore be incorporated into future public health strategies.

Competing interests: All authors declare that they have no competing interests

References

(1) Wellings K, Palmer MJ, Gear RS et al. Changes in conceptions in women younger than 18 years and the circumstances of young mothers in England in 2000–12: an observational study. *Lancet* Published online: May 23, 2016, <u>http://www.thelancet.com/journals/lancet/article/PIIS0140-6736(16)30449-4/abstract</u>

(2) Skinner RS, Marino JL. England's Teenage Pregnancy Strategy: a hard-won success. *Lancet* Published online: May 23, 2016 <u>http://www.thelancet.com/journals/lancet/article/PIIS0140-6736(16)30589-X/abstract</u>

(3) Wilkinson P, French E, Kane R et al. Teenage conceptions, abortions, and births in England, 1994–2003, and the national teenage pregnancy strategy. *Lancet* 2006; 368: 1879–86

(4) Registrar General Northern Ireland.2015. *Annual Report 2014*. Belfast: Northern Ireland Statistics and Research Agency

(5) Wilkinson P et al. Teenage conceptions, abortions, and births in England, 1994–2003, and the national teenage pregnancy strategy. *Lancet* 2006; 368: web appendix.

(6) Family Planning Association. 2010. Teenage Pregnancy Factsheet. London: Family Planning Association. <u>http://www.fpa.org.uk/factsheets/teenage-pregnancy</u> (accessed 13/06/2016)

(7) ISD. 2015. Long Acting Reversible Methods of Contraception (LARC) in Scotland. Year ending 31 March 2015. <u>https://isdscotland.scot.nhs.uk/Health-Topics/Sexual-Health/Publications/2015-11-03/2015-11-03-LARC-Summary.pdf</u> ((accessed 13/06/2016)

(8) NICE. 2014. Long-acting reversible contraception. NICE guidelines [CG30]. <u>https://www.nice.org.uk/guidance/CG30/chapter/introduction (accessed 13/06/2016)</u>

(9) World Bank. Adolescent fertility rate (number of births per 1,000 women ages 15–19) <u>http://data.worldbank.org/indicator/SP.ADO.TFRT</u> (accessed 13/06/2016)

(10) World Health Organisation. European Health For All Database. <u>data.euro.who.int/hfadb</u> (accessed 13/06/2016)

(11) Office for National Statistics. 2016. Statistical bulletin: Conceptions in England and Wales: 2014 <u>http://www.ons.gov.uk/peoplepopulationandcommunity/birthsdeathsandmarriages/conceptionand</u> <u>fertilityrates/bulletins/conceptionstatistics/2014</u> (accessed 13/06/2016)

(12) Information Services Division. 2015. Teenage Pregnancy. Year of conception ending 31 December, 2013. <u>https://isdscotland.scot.nhs.uk/Health-Topics/Sexual-Health/Publications/2015-07-07/2015-07-07-TeenPreg-Report.pdf</u> (accessed 13/06/2016)

Figure captions

Figure 1 Conceptions among women aged 15-17, England, Wales and Scotland, 1998-2014

Source: ONS,¹¹ ISD¹²

Figure 2 Conceptions among women aged 15-17, by Quintiles of Deprivation, Scotland, 2004-13

Source: ISD¹²



Year



Year