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## HYPITAT and the fallacy of pregnancy interruption reply

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## HYPITAT and the fallacy of pregnancy interruption

Hypertension in pregnancy is not a symptom but a sign elicited by screening asymptomatic women. Blood pressure rises physiologically towards term, and is a continuous variable. Hypertension can indicate pre-eclampsia in a minority, but is imperfect in isolation, requiring confirmation by proteinuria. The (much more common) physiologies of well hypertensive pregnant women are fundamentally and radically different from those of women with pre-eclampsia, who have significant alterations in biochemistry and haemodynamics.

HYPITAT (Sept 19, p 979)<sup>1</sup> is fatally flawed by the logical fallacy of using hypertension as both an entry and major endpoint criterion in determining whether interruption of pregnancy advantages the mother in ways that matter. Induction will lead to earlier resolution of most pregnancy-associated signs (eg, varicose veins) without us knowing whether morbidity is lessened.

Donna Johnson's associated Comment<sup>2</sup> rightly reads as an apology for a small trial in which two-thirds did not have pre-eclampsia at entry and the composite measure of maternal

morbidity was inadequate. Potential ill effects on the baby were not powered for; the intervention led to significantly smaller babies (270 g lighter, equivalent to >8% of birthweight). We ignore at our peril the lesson of unexpected child harm, which is only demonstrable in large trials with long-term outcomes.<sup>3</sup>

In otherwise well women, producing less severe hypertension alone would not justify early delivery. HYPITAT has not determined optimum management, yet the UK National Institute for Health and Clinical Excellence is using these data to determine clinical practice.<sup>4</sup> We are seriously concerned about the heterogeneity of the population studied, and the potential to interfere with normal pregnancies.

AS is an external adviser to the NICE hypertensive disorders in pregnancy guideline development group.

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### Authors' reply

We appreciate the comment by Susan Bewley and Andrew Shennan, since we share the same interest in not interfering with normal pregnancies.

Not coincidentally, we positioned our trial in the context of strong practice variation for women with mild hypertensive disease at term in our country. Before our study, 50% of women in the Netherlands who were diagnosed with gestational hypertension or pre-eclampsia at term

had an induction of labour; the other half awaited spontaneous delivery. Obviously, the attending obstetricians were either in doubt or had discordant views about this situation. In our opinion, this was not so much related to the fact that gestational hypertension is fundamentally different from pre-eclampsia. Like women with pre-eclampsia, those with gestational hypertension and their neonates are at increased risk of morbidity and mortality,<sup>1</sup> and, moreover, daily practice is imperfect in distinguishing both disorders.<sup>2</sup>

As stated in our paper, there was little clinical evidence on how to handle this situation, which unfortunately is not uncommon in obstetrics. Even so, it is not unusual to power a trial on surrogate endpoints if the alternative options—ie, either not doing a trial or failing to complete a (non-feasible) mega-trial—do not help in solving the clinical problem.

The intervention used in our study reduces the chance of already hypertensive women lingering in a potential hazardous situation, as defined in our primary outcome. We found a tendency towards a lower caesarean section rate overall, and no evidence for higher caesarean section rates in the subgroup of women without proteinuria.

Finally, who would not agree with Bewley and Shennan on the need for long-term follow-up? This was until recently not feasible in our setting, as was the case for a large number of past obstetric intervention trials, also by our critics.

In view of our findings, we, as well as the UK National Institute for Health and Clinical Excellence,<sup>3</sup> now recommend induction of labour in women with gestational hypertension or pre-eclampsia beyond an admittedly somewhat arbitrary threshold of 37 weeks' gestation. However, the data are presented with transparency, thus allowing everybody to draw their own conclusions, and, awaiting new data, do better for mothers and children.

We declare that we have no conflicts of interest.



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learning from each other's experience.<sup>4</sup> These topics, and advances since the conference in Rio, were reviewed in a meeting on Nov 15–16, 2009, in Havana, Cuba.

The Council on Health Research for Development (COHRED), and the Pan-American Health Organization (PAHO) are collaborating to support the strengthening of national health research systems in the region. The 49th Directing Council of PAHO approved on Sept 30, 2009, the PAHO Policy on Research for Health.<sup>5</sup> The approval of this policy re-emphasises the need for a systems focus for research development in the region, and shows commitment by health authorities to providing adequate governance and stewardship. The political support provided by PAHO and its Directing Council (in which all Member States are represented) will further help advance research in the region. Furthermore, COHRED and PAHO are working with countries in the region to use management and benchmarking tools such as Health Research Web to provide access to information and to facilitate exchange on national systems for health research.

We declare that we have no conflicts of interest.

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Anastasia Moloney<sup>1</sup> reports on the overall difficulties faced by health research in Latin America.

During the late 1960s, the Chilean government acknowledged the national need for research and development and created CONICYT—a funding agency that has allocated substantial efforts and funds to support competitive science in our country. However, most of the funding provided by CONICYT for health research is currently directed towards basic mechanisms of disease and led by an increasing number of academics with no medical training.<sup>2</sup> Furthermore, new science and technology centres of excellence are essentially dedicated to basic biomedical research. This situation has negatively affected the relative contribution of physician scientists, particularly those focused on clinical and public health research, who are becoming an endangered species in our academic environment.

To amend these circumstances, the Ministry of Health and CONICYT launched in 2002 a new health research initiative: the National Fund for Health Research (FONIS), a programme with separate allocation of resources aimed at strengthening investigation in health knowledge and technology relevant for our country. This change in the research political agenda is defining new scientific priorities, supporting new training opportunities, and providing research funding focused on significant health problems that afflict our population.

We praise the vision of key governmental and academic players that have redefined the national health research map, which must increase the amount, quality, and local impact of health research in Chile and could be used as a model for other countries within our region.

We declare that we have no conflicts of interest.

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## Health research in Latin America

Anastasia Moloney (Sept 26, p 1053)<sup>1</sup> identifies gaps and weaknesses in Latin America's health research, and indicates that integrated systems will help boost the amount and quality of health research produced in the region. We would like to highlight some recent developments, stimulated by the first Latin American Conference on Research and Innovation for Health<sup>2</sup> in Rio de Janeiro, Brazil, in April, 2008.

Since Rio, regional agreements<sup>3</sup> and policies have been developed, and several countries have advanced the development of their research agendas and strengthened their capacities. For example: Paraguay is working towards a formal health research system; El Salvador has included a section on health research in its national health policy; Guatemala has established a coordinating office for health research within the Ministry of Health; and Uruguay has announced the launch of a sectoral fund for health research. Other countries are implementing strategies that strengthen coordination and communication, and are sharing and



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