

between governments, researchers, organisations, and community leaders is also needed so that the actions proposed can be put into practice effectively.

Increasingly there is concern that the inequities exacerbated by the pandemic are only going to worsen, and that any progress towards gender equality made before the pandemic will be reversed. Hopefully these data will reinforce the need for decision makers to act before it is too late.

We declare no competing interests.

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Early introduction of allergenic food for all infants



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The 2015 Learning Early About Peanut Allergy (LEAP) study triggered a paradigm shift in the field of food allergy prevention from an understanding that, in infants at high risk of developing a peanut allergy, prevention was best achieved by peanut avoidance to active early peanut consumption.¹ LEAP showed that in infants at high risk of peanut allergy aged 4–10 months with either severe eczema or egg allergy, or both, peanut consumption three times a week achieved an 81% reduction in the prevalence of peanut allergy at 5 years of age.¹ However, the majority of cases of peanut allergy occur in infants who are not at high risk. For example, an extrapolation of the LEAP study to the Irish population demonstrated that 4.8% of Irish infants fulfilled the LEAP enrolment criteria.² Implementing the LEAP intervention would prevent 29% of annual cases of peanut allergy, since 59% of cases occur in infants who are not at high risk.²

After the LEAP study, global guidelines for infant feeding changed, advocating early introduction, with some countries restricting such guidance to peanut alone and emphasising risk status³ and others recommending a broader range of allergenic food introduction for all infants, irrespective of their individual risk status.⁴ Concerns have been expressed on two fronts: first, the validity of changing feeding recommendations for the general infant population on the basis of the LEAP

study, which was done in infants at high risk of peanut allergy, and, second, commencing early introduction before 6 months of age breaches the current WHO recommendation of 6 months’ exclusive breastfeeding,⁵ considering that the mean age of enrolment for the LEAP study was 7.8 months.⁶ However, food allergy can emerge before 6 months of age.⁷

Questions remain with regard to the evidence base for recommending early allergenic food introduction in all infants, irrespective of individual risk. In the Enquiring About Tolerance (EAT) study, six allergenic foods were introduced from 3 months of age and by age 3 years, a 20% reduction in food allergy to one or more of the six foods was observed, but this reduction was not statistically significant.⁸ Per-protocol reductions in allergy to any food or to specific foods were statistically significant but subject to potential bias and to the low level of adherence achieved (34% for all food and 52% for peanut).⁸

Therefore, the study by Håvard Ove Skjerven and colleagues reported in *The Lancet* is a welcomed response to questions regarding the efficacy of early allergenic food introduction in the general population of infants.⁹ This study, Preventing Atopic Dermatitis and ALLergies in Children (PreventADALL), was a large pragmatic trial of 2397 newborn infants recruited from the general



population in Norway and Sweden.⁹ The study had a cluster-randomised 2×2 factorial design in which infants were randomly assigned to no intervention, a food intervention (introduction of peanut, cow's milk, wheat, and egg from 3 months of age), a skin intervention (regular oil baths and facial cream from 2 weeks of age), or both interventions (food and skin interventions). Early introduction of the four foods resulted in a statistically significant reduction in the primary outcome of allergy to any interventional food at 3 years of age (31 [2.6%] of 1170 infants in the no food intervention groups vs 13 [1.1%] of 1224 infants in the food intervention groups, equating to a 60% reduction).

The overall protective effect of the intervention was driven by the peanut allergy results: 23 (2.0%) of 1170 infants in the no food intervention groups had peanut allergy compared with nine (0.7%) of 1224 infants in the food intervention groups, equating to a 63% reduction. The proportion of infants with egg allergy at 3 years was low in both groups (seven [0.6%] of 1170 infants in the no food intervention groups; five [0.4%] of 1224 infants in the food intervention groups). The efficacy observed for peanut was notable for two reasons. First, in the EAT and LEAP studies, the peanut intervention consisted of 2 g of peanut protein per dose (consumed three times weekly in LEAP and twice weekly in EAT). By contrast, no consumption dose was specified in PreventADALL. Families were asked to feed

their infant tastes of each food on at least 4 days per week. Frequency of consumption was recorded, but not dose consumed. Notably, only 78 (13%) of 599 infants in the food intervention group reported consumption of peanut four times a week or more during the key early introduction period from 3 to 6 months of age. Despite no dose being stipulated, adherence in the food intervention group during the key early introduction period (age ≤6 months) was similar to the EAT study: 227 (35%) of 641 infants had full protocol adherence to at least three of the four early introduction foods and 251 (39%) infants for peanut. Second, peanut consumption in the food intervention group reduced markedly after the early intervention period. Half of the food intervention group had ceased peanut consumption completely between age 6 and 9 months (195 [49%] of 396 infants) and between age 9 and 12 months (185 [46%] of 403 infants). Hence the statistically significant findings of the PreventADALL study seem to be derived from infants consuming a small dose of peanut, on average between 1 and 3 times a week, up to 6 months of age.

Consistent with EAT, per-protocol consumption in PreventADALL was associated with increased efficacy: of the 387 infants who achieved full adherence to the food intervention regimen, only one developed a peanut allergy and one an egg allergy.

The PreventADALL regimen consisted of normal foods and was inexpensive and safe. Similar to the EAT study, no deleterious impact was observed on breastfeeding at the end of the key early introduction period at 6 months of age. Although the desire for the food and skin interventions to be pragmatic was understandable, since families were not asked to record the actual amount of allergenic food consumed, there is residual uncertainty regarding the dose of food required to induce tolerance. The prevalence of food allergy in the general population is low and further studies to attempt to resolve the issues of dose and duration of consumption required to induce tolerance would have to be prohibitively large. Furthermore, arguably such studies are unnecessary, with PreventADALL providing robust evidence to support early allergenic food introduction among all infants, including infants not at high risk of food allergy in whom the majority of food allergies occur.

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After the Ockenden review: a chance to reset maternal and perinatal care in the UK?



The Ockenden review¹ into the failings in maternity care at Shrewsbury and Telford Hospital NHS Trust in the UK makes for sobering reading.² The review focuses predominantly on the period from 2000 to 2019 and estimates that there were significant or major concerns in the care of nine women and more than 200 babies who died while receiving care at the Trust. Many more women and babies suffered serious injuries. It was clear that the Shrewsbury and Telford Hospital NHS Trust did not investigate, learn, change, or listen to families when adverse events occurred.¹ The conclusions of the Ockenden review make it clear that safe staffing levels, a well trained workforce, an ability to learn from incidents, and a willingness and ability to listen to families are all crucial for safe maternity care.

The 15 immediate and essential actions advised in the Ockenden review¹ are necessary, but insufficient to prevent similar tragedies in the future. Although tempting to try and identify discrete and fixable issues, adverse outcomes in maternity services arise from a complex mix of factors often combined with inadequate leadership and the wrong workplace and care culture. Unfortunately, there are fewer indicators of a struggling maternity service compared with other areas of hospital care: there are no waiting lists, and process outcomes, such as numbers of inductions or caesarean sections, are only weakly informative. The Ockenden report highlights how serious issues about the care women received were “hidden in full view” at the Shrewsbury and Telford Hospital NHS Trust, where

countless opportunities for internal and external stakeholders to identify and address failings in the quality of care were missed. The devastating outcomes for too many women at this Trust are unfortunately the latest in a repeated pattern of such failings in maternity care in the UK.^{3–5} Addressing the wider issues of workplace and clinical care culture and leadership is crucial.

This latest system-wide failing was widely reported in the media as resulting from an obsession with natural childbirth. However, the problem is not with so-called natural childbirth per se but with natural childbirth at all costs and at the expense of safety and choice. The Ockenden review points to a lack of safe and

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