EDITORIAL ANNOUNCEMENT

In response to the continued increase in the number of high-quality papers submitted to the *Journal* from all parts of the world, we have again increased the number of published pages. The change to A4 format last year significantly increased the amount of material per page, and for 1992 the total number of pages was increased by 12½% (96 additional pages in the course of the year).

However, the flow of papers has outstripped even this planned increase. To deal with the developing backlog, and to avoid publication time becoming unacceptably long, we are making five issues (March–July) longer than average. The extent of each issue, for the remainder of 1992, will then revert to a lower level. In this way we intend to keep faith with our authors and subscribers in dealing with the short-term difficulty created by the *Journal's* success. A further increase in pages is planned for 1993.

B. I. DUERDEN

EDITORIAL

Pertussis in adults: significance for disease transmission and immunisation policy

Pertussis or whooping cough, the illness caused by *Bordetella pertussis* and *B. parapertussis*, continues to be in the public and scientific spotlight for various reasons. In response to concerns about possible reactogenicity of the pertussis vaccine component of diphtheria/tetanus/pertussis (DTP) triple vaccine, there was reduced vaccine acceptance and increased incidence of pertussis in the UK and other European nations beginning in the 1970s.¹ This situation provided an additional stimulus for research on pertussis pathophysiology and pertussis vaccine. Resulting at least in part from these activities, more than 10 acellular pertussis vaccines are being evaluated as possible replacements for the whole-cell product.¹ In conjunction with the enhanced attention that childhood pertussis and pertussis immunisation have received, there has been increasing recognition of the number of cases of pertussis in adults.

Although the limited duration of pertussis vaccine immunity was clearly demonstrated by Lambert in 1965,² this information has not been translated into a widespread sensitivity of general practitioners and hospital staff to the fact that adults with cough, especially when severe and prolonged, may have pertussis.³ The most striking and best documented examples of adult pertussis are those of health care workers and residents of chronic care facilities who have acquired pertussis as part of an outbreak with nosocomial transmission.^{4–7} One major factor which frequently delays the diagnosis of pertussis in this situation is the relatively long incubation period and prodromal (catarrhal) phase, compared to many common viral respiratory infections. Frequently,

secondary cases do not become symptomatic until 7–14 days after exposure and even then develop only non-specific symptoms.^{8–10} The major manifestation in adults may be rhinorrhoea or sore throat and the cough is rarely typical, with whoop limited to only a small proportion of cases. Often, adult cases of pertussis are identified when an unimmunised child, exposed to a parent, sibling or grandparent with a cough, then becomes ill with what is subsequently recognised as pertussis.^{11,12} Even under those circumstances, the primary case is frequently overlooked because of lack of inquiry by the physician.

Epidemiological data have begun to document that although the incidence of pertussis is not increasing, adults represent a greater proportion of reported cases.¹³ Given the limitations of the notification system in the USA and elsewhere, and the low level of recognition of adult pertussis, it seems likely that the majority of cases, in areas where the level of childhood immunisation is high, fall into that category (>16 years of age). If this hypothesis is correct it causes a dilemma, since pertussis vaccine is neither licensed nor recommended for routine use in individuals over 6 years old. Certainly, the perceptions about whole-cell pertussis vaccines will continue to preclude their use as a standard prophylactic measure in the adult population. However, the development of a family of acellular pertussis vaccines consisting of one to five components provides a novel opportunity to reconsider current immunisation policies. The relatively lower reactogenicity of these products (in comparison with whole-cell vaccines), even in adult populations, will aid in this effort.^{14,15} Therefore, evaluation of the

acellular pertussis vaccines should be directed at adults as well as children so that data will be available for consideration of routine administration of acellular pertussis vaccine, in addition to tetanus and diphtheria toxoids, every 10 years throughout life. This approach has the potential for expanding herd immunity enormously in the population and perhaps making possible the eradication of pertussis. Meanwhile,

increased education of physicians and awareness of pertussis in the adult population will enable the health care system to deal with this problem.

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