Presenting author contact details

Dr. Meeru Gurung, Senior Research Fellow, Paediatric Research Unit,
Department of Paediatric, Patan Academy of Health Sciences (PAHS),
P. O. Box 26500, Lagankhel, Kathmandu, Nepal
Email: meerugurung@pahs.edu.np/drmeeru@hotmail.com

Author List:

IMPACT OF 10-VALENT PNEUMOCOCCAL CONJUGATE VACCINE INTRODUCTION ON
INVASIVE PNEUMOCOCCAL DISEASE (IPD) IN NEPALESE CHILDREN

Meeru Gurung1,Merryn Voysey2,Stephen Thorson1,Sanjeev Man Bijukchhe1,Peter
O'Reilly2,Michael J Carter2, Bibek Khadka1,AnimeshKhalal Basnet1,Sunaina
Gurung1,Bhishma Pokhrel1,Ganesh Shah1,Imran Ansari1,Sarah Kelly2,Maria Knoll5,Katherine
L. O'Brien5, Dominic F. Kelly2,4,David R. Murdoch3,Andrew J. Pollard2,4 and Shrijana
Shrestha1

Affiliations:

1Paediatric Research Unit, Patan Academy of Health Sciences, Kathmandu, Nepal.
2Oxford Vaccine Group, Department of Paediatrics, University of Oxford, Oxford, United
Kingdom.
3Department of Pathology, University of Otago, Christchurch, New Zealand.
4NIHR Oxford Biomedical Research Centre, Oxford, United Kingdom.
5International Vaccine Access Centre, Department of International Health, Johns Hopkins
Bloomberg School of Health.
Background:

Methods:
Children (aged 2 months to <14 years) admitted to Patan Hospital, Nepal with pneumococcus detected in blood, CSF or pleural fluid were included. Serotyping was by Quellung method.

Results:
Pre-vaccine, 6/22(27.3%) IPD cases were age <2 years; post-vaccine, 5/36(13.9%) were <2 years.

Ratio of vaccine-type to non-vaccine-type IPD among <2 y olds was 5:1 pre-vaccine and 2:3 post-vaccine; among ≥2y olds, the ratio was 13:1 pre-vaccine and 7:1 post-vaccine.

Most (32/41, 78%) vaccine-type IPD was serotype 1: 3/7 among <2 year olds (n=1 post-vaccine); 29/34 among ≥2 year olds (n=17/19 post-vaccine were >4 years old).

Among 44 IPD cases detected from blood, 36 (82%) were vaccine-type (n=29 were ST1), and 7 were non-vaccine-type (6C, 10A (n=2), 19A, 24F, 38, 41). Of 13 detected from CSF (1 culture, 3 PCR and 9 Binax-only), 5 were serotyped (1, 14, 6B, 6A/B, 7F). The 3 pleural fluid cases were serotypes 1 (n=2) and 19A.

Conclusion:
Post-PCV10 introduction, IPD among <2 year olds fell; although a high proportion of ST1 IPD remains, most were >4 years old.

Key words
Invasive pneumococcal disease, pneumococcal conjugate vaccine, children, Nepal, vaccine impact