Comparative insights on clinico-epidemiological and bacteriological features of pneumonia among Bangladeshi and Malaysian children: Does socio-economic status matter?


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Childhood Pneumonia (CPnm) with its 120 million global episodes remains world’s leading cause of child-death and have an estimated 0.22 episodes/child year. While H. influenzae type-b causing CPnm has declined dramatically, the non-typeable and Hia, Hif have emerged. Since CPnm reportedly differs in population characteristics and socio-economic-status among various countries, this paper highlights cumulative findings from a series of clinico-epidemiological and bacteriological studies on CPnm carried out in Bangladesh & Malaysia relating to socio-economic status, in particular. Posterior-nasopharyngeal samples taken from under-five years-old pneumonic children using specially designed cotton-tipped flexible-plastic loops/wires were streaked on-to supplemented chocolate-agar. Isolated haemophilus colonies were serotyped and antimicrobial susceptibility (disk-diffusion) were performed. In Bangladesh (Dhaka Medical College Hospital), H.influenzae (H. inf) were isolated in 36.2% children, of which ~4.3% were type a-Hia, 1.9% Hid, 1.3% Hic and 0.6% each of Hie & Hif, while vast majority remained either non-typeable (18.2%) or Hif (9.3%). Contrarily, in Malaysia (AlorSetar-SBH Hospital) only 4.8% children (7/148) yielded H. inf all being non-typeable. While multidrug-resistance (MDR)-profile did not differ between Bangaldeshi & Malaysian Hin-isolates (p>0.59), child-health care practice differed between Malaysia and Bangladesh in terms of clolestrum-introducing (p<0.04), exclusive-breast feeding (p<0.02) and early-hospitalization (p<0.01). similar to parental education, cleanliness/personal hygiene/handwashing and less or smoke-free bedroom (p<0.03, on-average). To conclude, extrapolated data from these studies evidences that child-care practices, socio-economic norms and surrounding environment remain plausible factor(s) for pneumonia among young children- a finding which needs more studies focusing causal relationships for further confirmation.

Biography
Kazi S Anwar, MD (USSR), Mphil (England), Pub Health Training (Japan), is a Bangladeshi Public Health Physician & Microbiologist who devoted most of his research potentiality in child public health. He conducted several research projects both at the national (Bangladesh) and international level (Japan, England, Saudi Arabia, Korea, etc.). Currently he is teaching medical students and supervises MSc-thesis at the Faculty of Medicine, AIMST University, Malaysia. He published >50 papers in globally reputed journals, mostly in child public health and presented >26 papers worldwide. He remains a member in editorial/reviewer board of some globally reputed medical journals since long.

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