Beyond 12 months. The second NG identified five rehabilitation referral recommendations to coincide with the referral to a medical specialist for diagnosis: Motor intervention specialist (PT and/or OT) for all; speech-language pathology if there is a communication delay; audiology if parental-concern or communication delay; functional vision specialist if vision concern (not fixating, following, tracking); a feeding specialist if feeding difficulties (e.g., poor suck, swallowing, choking, not gaining weight).

Conclusions/Significance: KT tools are urgently needed to assist primary care providers in the early detection of CP. This study created the content for this tool, and following the validation process, we will collaborate with knowledge-users to determine the optimal format(s) in which to deliver this tool to promote uptake and use (e.g., App, website, pocket card, pamphlet, poster).

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Comparison of videofluoroscopic swallowing study and radionuclide salivagram for aspiration pneumonia in children with swallowing difficulty

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Background and Objective(s): There are two studies used in children to evaluate swallowing function: a video fluoroscopic swallowing study (VFSS) to assess swallowing process, and a salivary gland scan (SGS) to detect salivary aspiration. Since there is no previous study investigating the usefulness of conducting both VFSS and SGS in children, the aim of this study is to show the correlation, reliability, and usefulness of VFSS and SGS.

Study Design: Retrospective cohort study.

Study Participants & Setting: Pediatric patients who underwent both VFSS and SGS simultaneously under the suspicion of aspiration or swallowing difficulty from January 2001 to June 2016 were reviewed. 110 pediatric patients (mean age 28.32 mo, 65 boys, 45 girls) were included in a tertiary hospital.

Materials/Methods: Age, gender, BMI, underlying disease, feeding method, findings in VFSS or SGS, and medical records suggesting aspiration pneumonia (AP) (such as clinical opinions, chest radiograph, laboratory findings, and usage of antibiotics) were reviewed. Independent t-test, Mann-Whitney, odds ratios, linear by linear association analysis, and Kappa value analysis were used for the analysis.

Results: Among 110 patients, 76 patients were diagnosed as AP, and AP significantly correlated with ASHA-NOMS (American Speech and Hearing Association-National Outcomes Measurement System) scores (p<0.001), abnormal findings in pharyngeal phase (p<0.001) in VFSS, and abnormal findings in SGS (p<0.001). SGS and VFSS abnormalities were significantly associated with AP, with the odds ratio of 4.58 and 4.30 respectively. However, the findings of SGS were weakly consistent with those of VFSS (Kappa=0.21, p=0.03), which imply that both studies were not reliable enough to one another. The results of VFSS correlated with AP in children with normal results in SGS (p=0.01), and results of SGS tended to correlate with aspiration pneumonia in children with normal results in VFSS (p=0.06). More abnormal findings in two studies showed statistically significant linear associations with presence of AP (p<0.001), indicating that more possibility of AP can be mentioned when there are abnormal findings in both studies than just one.

Conclusions/Significance: VFSS and SGS are valuable evaluation tools for swallowing difficulty and AP. Since one study does not represent everything, conducting both studies are useful in evaluating swallowing difficulty and AP in children.

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Associated impairments among children with cerebral palsy in rural Bangladesh: findings from the Bangladesh Cerebral Palsy Register (BCPR)

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Background and Objective(s): Data from developed countries suggest that cerebral palsy (CP) is often accompanied by other comorbidities such as epilepsy and intellectual impairments. There is limited data on associated impairments among children with CP in low and middle income countries (LMICs) like Bangladesh. Lack of evidence and data for policy makers and planners limits the national capacity to develop a plan of action on providing specialist care and allied health services for children with CP. We aimed to define the burden of associated impairments among children with CP in rural Bangladesh from a population based CP surveillance.

Study Design: Population based cohort study/chronic disease surveillance.

Study Participants & Setting: This study uses data from the Bangladesh Cerebral Palsy Register (BCPR); a population based CP register in a rural sub-district (Shahjadpur; child population ~226,114) of Bangladesh. Recruitment into the BCPR commenced on January 2015 and ended in December 2016. All children from the surveillance area aged <18 years with a clinical diagnosis of CP were eligible for inclusion.

Materials/Methods: We used the community based key informants method (KIM) to identify children with CP in the surveillance area. Diagnosis of CP was made based on history and clinical examination by study physicians. The BCPR registration form, a modified version of the Australian CP Register (ACPR) record form, was used to collect information on maternal health, birth history and the nature of disability. Information on associated impairments (e.g., epilepsy, intellectual, visual, hearing and speech impairments) were collected from parent report and clinical examination.

Results: Since January 2015, 726 children with CP have been registered in BCPR. 61.8% were males and the median age