OC21 SAFE WATER VERSUS NORMAL SALINE NASOPHYRNX WASH IN THE PREVENTION OF COMMON COLD AMONG CHILDREN: A STRATIFIED RANDOMISED CONTROL TRIAL

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Introduction Nasal rinsing with normal saline water is prescribe in paediatric practices in prevention of the upper respiratory infection (URTIs) in Pakistan. Safe water is not worse in effectiveness to normal saline effectiveness in nasopharynx rinsing in primary prevention of common cold has not been established by trials.

Methods Double blind stratified randomized controlled trial carried out in August 2017-January 2018 winter season in Karachi, Pakistan. 774 healthy children aged 02 months to 5 years were included, randomly assigned to nasal wash with normal saline, safe water group at least 3 times a day followed-up 90 days. Features of URTIs recorded on check list. Per protocol analysis.

Findings 260 children contracted URTIs. Incidence rate of URTI was 0.52 episodes per 60 person days among control. Incidence rate decreased to 0.34 episodes per 60 person days in the safe water group and 0.48 episodes per 60 person days in the normal saline group. Non inferiority test value were 0.997 (90% CI=0.904–1.101). Safe water rinsing tended to decrease nasal symptoms ($p=0.055$). As hazard ratio=0.60, 95% CI=0.39–0.95

Innovations Safe water rinsing was non inferior in effectiveness to normal saline in prevention of URTIs among healthy children. Safe water is cost effective modality would greater benefit the society.

OC22 PARENTAL RATING OF FOLLOW-UP CARE FOR THEIR VERY PRETERM CHILDREN IN EUROPE

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Background Infants born very preterm are at risk of developing multiple health and developmental problems. Because the prognosis of each individual child is unknown at discharge, follow-up programs are essential for identifying health needs early, enable timely intervention and coordinate health services from multiple providers. Despite their recognized importance, there have been few evaluations of these programs, in particular among parents, whose involvement is crucial for successful follow-up. This study investigated how parents rate their very preterm children's follow-up care in Europe.

Methods The data come from the Screening to improve Health In very Preterm infantS (SHIPS) study, which followed up the area-based EPICE cohort of infants born before 32 weeks' gestation in 2011/12 in regions in 11 European countries. Perinatal data were abstracted from medical records and socioeconomic and child health data were collected with parent-report questionnaires at 2 and 5 years. At 5 years, parents rated the follow-up care received for their child's

prematurity (poor, fair, good, excellent) and provided suggestions for improvement as free-text comments. We measured the percentage of poor or fair ratings and associated factors, including country, maternal sociodemographic characteristics, perinatal characteristics (gestational age, neonatal morbidities) and current health and developmental problems.

Results Questionnaires were filled in for 3414 children (51% response rate), by mothers (84%), fathers (14%) and other caretakers. 93% reported receiving follow-up care for their child's prematurity. A low percentage (13.7%) judged follow-up care to be poor or fair, but this varied from <10% in France and the Netherlands to >20% in Denmark and Poland ($p<0.001$). Higher maternal education was related to more dissatisfaction ($p<0.01$). Negative appreciations of care were highest when children had diagnosed health problems, especially cerebral palsy (32.2%) and developmental delay (28.5%). After adjustment for current diagnoses, perinatal characteristics were not significantly related to care ratings. Common themes highlighted in free-text comments (from 1032 parents) included the need for longer-term follow-up, focusing on more than physical health and lack of knowledge about prematurity among general practitioners. Some themes were mentioned more frequently in some countries, such as waiting times (Poland), lack of care coordination (Sweden) and length of maternity leave (Portugal).

Conclusions Dissatisfaction with follow-up care was low overall, but was higher among those most reliant on health services. Many common themes emerged from parents' comments despite geographic heterogeneity. Further research is needed to understand differences in reported satisfaction between countries and by maternal educational level.

OC23 THE IMPLEMENTATION OF A CROSS-JURISDICTIONAL CLINICAL NETWORK FOR CONGENITAL HEART DISEASE IN CHILDREN AND YOUNG PEOPLE

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Purpose To develop an All-Island Congenital Heart Disease (CHD) Network to provide high quality and timely access to specialist cardiac services for all children on the island of Ireland.

The core objectives of the All-Island CHD Network are:

Appropriate CHD treatment for all children and young people on the island as close to home as appropriate.

Timely access to quality treatment through the creation of a single waitlist

Provision of a safe and sustainable model of care

Development of a research and innovation hub that delivers best practice solutions

Methods In 2014, an International Working Group Report recommended the cessation of surgery in Northern Ireland (NI) for Paediatric CHD, leading to children from NI travelling to Great Britain (GB) to receive emergency, urgent and elective surgical intervention, including cardiac catheterization, a significant risk to the child and at great cost to the health service and families. There was Ministerial acceptance of the recommendations, which led to the creation of an All-Island CHD Network to enable CHD services in NI and Republic of Ireland (ROI) collaborate and work as a single Network to

achieve essential national and international standards for CHD service provision on the Island. The basic concepts of such a network are of partnership, service integration and formal arrangements.

Results To date, all NI Cardiac Catheterisations are carried out in ROI. In addition, all NI emergency and urgent surgical cases have been transferred to ROI, thereby eliminating the need for children and families to travel to GB. During 2018, the Network commenced the transfer of elective surgical patients to ROI. The Network model of care includes the development of services in regional centres, the introduction of 5 Paediatrician with Expertise in Cardiology (PEC) posts across the island, implementation of an all – island CHD research strategy and the development of a joint training and education programme for health care professionals. This is the first cross-jurisdictional Clinical Network internationally and the initiatives above, complicated & often complex in a single jurisdiction, are even more so when operating cross-jurisdictionally, particularly in the midst of Brexit uncertainty.

Conclusions The all-island CHD Network is a linked groups of health professionals and organisations, working in a co-ordinated manner, to ensure equitable provision of high quality, clinically effective services to this complex cohort of patients. There have been many learnings, many of which are transferable to other multi-agency Networks and Systems.

OC24

THE VISION AND POTENTIAL FOR A NATIONAL CHILD HEALTH E-HEALTH FRAMEWORK IN EUROPE

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Good records are vital to joined-up healthcare, ensuring delivery of preventive health, and monitoring public health. In all health spheres, digitisation and e-health are the appropriate new technologies. However, hitherto children have been badly served, and the literature shows minimal recent research in Europe.

All European countries are encouraged to lodge with WHO their current e-health plan. In 2016 the Models of Child Health Appraised (MOCHA) project examined these for 30 countries, and found only 11 (36.6%) had specific mention of children and adolescents' issues. However, some countries had innovations in hand, including a cloud-based immunisation system in Hungary, and a parent and child portal in Latvia.

Record linkage is vital, yet only 25 (83.3%) of countries have a unique health record identifier, with only 9 (30%) issuing from birth. All countries but four have general use of electronic health records in child primary care. Only Croatia has a child-specific primary care EHR; most others are all age systems.

Fourteen countries have a separate child public health record system; in half of these are appointments issued. Countries vary in data exchange policies between primary and secondary care; with community and preventive health providers, and with the school health service. There is also variation between countries on children's record access, and on confidentiality from parents.

Standards bodies are involved in a European Patient Summary, which only marginally impacts on children's needs. ECDC promotes all-age Immunisation Information Systems.

WHO promotes Home Based Records, but there are no standards, or established best practice.

Web sites and mobile phone apps are modern health support tools, but they can be unreliable and can breach privacy. Only six countries have accreditation processes for apps, and eight have them for web sites. A few countries have instigated specific web sites for health advice for children.

E-health is an ideal way to facilitate child health clinicians and give children relevant easy access to services. Several good initiatives exist, and ECDC and standards bodies are contributing, but overall the situation is poor. But with evaluation and collaboration involving professional and standards bodies, WHO and the EU, existing best practice could be drawn on to identify an optimal model on which all countries could draw. This would include:

Record linkage from birth

Standards for data items and functionality including condition-specific algorithms.

Access, sharing, and consent protocols

Approved anonymised use for research

Web site and app approval criteria.

OC25

GROWTH AND NUTRITION SUPPORT IN INFANTS WITH UNIVENTRICULAR PHYSIOLOGY

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Background Growth impairment in infants with univentricular congenital heart disease is well documented. Meeting nutritional requirements in the early phase of infancy can be particularly challenging as these infants undergo complex surgical palliation within the first few days of life. This audit is a retrospective study aiming to evaluate the nutritional status of these infants.

Method Eighty-nine infants with single ventricle physiology underwent a surgical Norwood or a hybrid/interventional procedure (stage 1) as a neonate in OLCHC during the time period January 2014 - December 2018. Subject data collected included demographics, procedure type, anthropometry, mode and type of feeding, nutritional intake and nutrition related complications. Weight for Age Z scores (WAZ) were calculated using the World Health Organisation Standards.

Results WAZ <-2 is a screening criterion for undernutrition. Mean WAZ at birth was -0.1 on discharge was -1.44 and prior to stage 2 surgery Bidirectional Glenn was -1.26. On discharge (median length of stay 25 days) post stage 1 procedure, 29% of infants had a mean WAZ < -2. A paired sample T test demonstrated that the drop in mean WAZ from birth to discharge is statistically significant p value <0.001 (significance <0.05).

Median number of days to any form of nutrition support was 3 and to first enteral feed was 6. Median number of days to achieve basic energy requirements from EN was 16. Preoperative trophic feeds and parenteral nutrition were provided to 18% and 38% of infants respectively. Vocal chord palsy and chylothorax arose frequently amongst the Norwood group with one in five infants experiencing such difficulties. On discharge post stage 1 intervention, 48% of infants were