evidence for this seems to be mixed and inconclusive. Additionally, Calcium Chloride appears to be worse an irritant comparatively and is more likely to cause tissue necrosis with extravasation, thereby rendering Calcium Gluconate a safer option when used peripherally.

G252(P) ABSTRACT WITHDRAWN

G253(P) 4HS AND 4TS – COULD YOU MANAGE THEM ALL?

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Background Cardiac arrests, although rare in Paediatrics, are extremely high-pressure, high-stakes situations. Identifying any reversible causes, commonly referred to as the 4Hs and 4Ts, is an important step in the management of cardiac arrest. Ascertaining the cause more quickly has the potential to improve our currently poor outcomes.

Aim To evaluate how quickly and accurately healthcare professionals can recall the reversible causes of cardiac arrests and their ability to narrate the management of each of these.

Methods Using a standardised proforma, 38 APLS providers (nurses, APNPs, junior doctors and consultants) were asked to recall the 8 reversible causes of cardiac arrest whilst being timed. Next, they were asked to describe management of each. Participants were told this was a competition and therefore asked not to discuss with others.

Results Only 12 of the participants were able to recall all 8 reversible causes with their times ranging from 16 to 95 seconds. There was little correlation between seniority or experience of cardiac arrests with ability to recall all 8 causes; half of those able to recall all causes were foundation or ST1–3 level doctors. The order of recall was also recorded. Despite hypoxia and hypokalaemia being the most common causes, tamponade was the most commonly recalled (86.6%) in this survey. Qualitative data showed that overall participants were able to manage hypoxia, hypovolemia, and hypothermia with some confidence but were less able to describe management of the remaining causes.

Conclusion Healthcare professionals are not always able to recall all reversible causes, and as such there is potential for delay in cause identification in emergency situations. A simple aide-memoire has the potential to improve speed of identification of cause of arrest and possibly save lives and improve outcomes. This is being developed to trial locally.

G254(P) INCIDENCE OF FIREWORK RELATED INJURIES AT ROYAL HOSPITAL CHILDREN FOR GLASGOW

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Aims and Objectives

- Annual incidence of firework related injuries from 2015–2018. (Injuries included those sustained from fireworks, sparklers and bonfires.)

- To assess if incidence of firework related injuries is increasing.
- To assess relationship between firework injuries and SIMD index

Methods Data was collected from nurse led burns clinic attendees and A&E attendees between 31st October and 10th November from 2015–2018. The type of injury; site of injury; age when injured; gender; severity of burn; and postcode were collected. Postcode data was then inserted into Scottish Index of Multi Deprivation Index (SIMD) database to extract SIMD index.

Results 30 children were injured by fireworks, sparklers or bonfire between 2015 and 2018, 9 females and 21 males. Ages ranged from 2–15 years. The most common body part injured was the hand (n=17) and the majority of injuries happened on bonfire night (n=16). Fireworks injured the most people (n=18), followed by sparklers (n=8) and then bonfires (n=4). The majority of injuries were superficial (n=15). Firework related injuries also seem to be on the increase, and this is depicted in table 1 below. Lower SIMD indices had higher indices of burns (p=0.0015) and this is depicted in table 2.

Abstract G254(P) Table 1

Injuries per year	Frequency
2015	4
2016	7
2017	6
2018	13

Abstract G254(P) Table 2

Injuries by SIMD Quintile	Frequency
SIMD 1	14
SIMD 2	6
SIMD 3	4
SIMD 4	5
SIMD 5	0

Conclusions Firework related injuries increased by almost double in 2018 compared to 3 previous years. Lower SIMD quintile ranking also had significantly more firework related injuries. This could suggest a link between deprivation and likelihood of firework injury. This information could be used to target more deprived areas with firework safety campaigns, as well as overall increase in campaigning in 2019 to assess if injuries can be reduced in 2019.

G255(P) FROM A&E TO THE COMMUNITY, PARENTS LEARN TOGETHER THROUGH ABC

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Problem and Aims Our A&E department assesses 45,000 children every year, 40% of these could be self-managed or treated in primary care. This proportion of inappropriate presentations

is unsustainable and requires a radical community-based approach. We coproduced a community outreach project to:

- Educate and improve parents' confidence to deal with childhood illnesses and injuries.
- Decrease anxiety-related and avoidable A&E attendances by signposting alternative NHS services.
- Develop social support structures.

Method Paediatric staff invited families with: children under 1 year, limited social support or partial understanding of health-care systems to collaborate on developing a programme of health education and social support. We facilitated groups discussing childhood illnesses and parental concerns. Parents reported 'fear of death' so we devised a programme including basic life support training. An online social network, local events, holiday sessions and weekly support groups were established to help address isolation and social inequalities. To expand our impact we contacted frequent A&E attenders, invited expectant parents, approached local health visitors and advertised through local GPs, schools and libraries.

Results Between May and June 2019 we ran four 1-hour sessions on common childhood problems each attended by 6–12 parents. 100% of parents reported increased learning and 100% joined the 'ABC Parents' WhatsApp group for ongoing support.

Between May and October 2019 we conducted four free workshops delivering BLS, illness prevention, and health services education. Over two 3-hour sessions parents discussed child health concerns, experiences and services awareness. Out of 70 attendees, 97% reported feeling confident in managing childhood illnesses and 94% were more aware of local services and how to access them after the courses. To date there are 19 known avoided A&E attendances, with parents delivering care at home or using other NHS services.

Conclusion Coproduction with parents and collaboration with local organisations is a powerful and mutually beneficial mission. We increased parental health knowledge, confidence and avoided unnecessary A&E attendances. Our ABC Parents network is 'Achieving Better Communities of Parents' by providing support, resource signposting, poverty advice and our champions are expanding this paediatric community outreach for healthier children's futures.

G256(P) ABSTRACT WITHDRAWN

Paediatric mental health association and british association of paediatricians in audiology (BAPA)

G257 A BIOPSYCHOSOCIAL MODEL OF CARE FOR CHILDREN AND YOUNG PEOPLE (CYP) WITH PERSISTENT, UNEXPLAINED, PHYSICAL SYMPTOMS (PUPS)

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Aims PUPS are common, reported by 10–25% of CYP.¹ Symptoms can lead to poor function, overuse of medical resource and reduced school attendance. Co-morbid mental health problems often go unrecognised. Longer term outcomes include adult chronic physical/mental ill-health, reduced employment, high health/welfare costs.^{2 3}

We established a pilot multi professional assessment/support service to meet the needs of these CYP.

Methods Weekly multiprofessional meetings including paediatrician, psychiatrist, CAMHS worker, psychologist and education wellbeing advisor (EWA) to discuss cases referred by health professionals. Patient/parent consent given. Outcomes included holistic paediatric assessment, joint appointments (paediatrician and CAMHS worker/psychologist), advice and guidance (A&G) to referrer such as signposting/facilitated referral to community services. Some were offered short-term therapeutic intervention with CAMHS worker/psychologist and/or psychiatric assessment. In all cases clear communication with school was facilitated by EWA who supported school attendance; assisting re-integration and improved attendance/wellbeing at school.

Results Over 18 months we discussed 180 patients: 74 male, 104 female, 2 transgender. Average age 14 years. Common PUPS were musculoskeletal pain, fatigue, headaches, abdominal pain and unexplained episodes. All had reduced school attendance. 111 cases referred by Paediatricians/Allied Health professionals, 56 new GP referrals, 13 presented acutely. 106 were offered paediatric appointments. >50% were discharged with recommendations/advice to primary care/education. 25 had joint appointments. 38 were seen by psychiatrist/CAMHS worker/psychologist for assessment/therapeutic intervention. Remainder received A&G and EWA support.

Cost analysis demonstrated average savings of £2600/patient in secondary care. School attendance improved for the majority with reintegration plans and reduction in use of out of school provision with associated cost savings. Referrals to tertiary services for chronic pain/fatigue were reduced and joint working with these services was developed. Linked case examples show significant improvement.

Conclusion Multiprofessional assessment using a biopsychosocial approach to CYP with PUPS leads to better recognition of underlying mental illness, improved short-term functional outcomes, reduced medical costs and improved school attendance. The challenge is securing longer term funding.

REFERENCES

1. Hinton D, & Kirk S. Families' and Healthcare Professionals' perceptions of health-care services for children and young people with medically unexplained symptoms: a narrative review of the literature. *Health & social care in the community* 2016 (1);**24**:12–26.
2. Campo JV. Annual Research Review: Functional somatic symptoms and associated anxiety and depression – developmental psychopathology in pediatric practice. *Journal of Child Psychology and Psychiatry* 2012;**53**:575–592.
3. Bermingham SL, Cohen A, Hague J & Parsonage P.. The cost of somatisation among the working-age population in England for the year 2008–2009. *Mental Health in Family Medicine* 2010;**7**:71–84.

G258 ENGAGING A COMMUNITY IN SUPPORTING THE MENTAL HEALTH OF YOUNG PEOPLE

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