Concerned this posed a risk to our patients, we utilised well-known children's games to assess the problem.

Objectives Could we accurately pass on verbal information in our resus bay whilst wearing reusable FFP3 masks?

Methods

Whisper down the lane: 4 participants wore FFP3. Additional participant stood 2m apart and gave instruction wearing a surgical mask. 3 scenarios trialled twice, once using a common APLS instruction (e.g. please give phenytoin 20mg/kg IV over 20 minutes – 200mg total please) and once a non-sensical instruction participants had no cognitive bias towards (e.g. cow really needs to jump in the bucket to impress the pig). Participant 1 relayed instruction to participant 2 as they entered the room and so on.

Scenario 1 – no background noise, standing 2 metres apart

Scenario 2 – background noise (defibrillator/monitors on, 'baby shark' playing in the background)

Scenario 3 – background noise and participant receiving instruction distracted building tower of blocks.

Treasure hunt: One registrar relayed 8 simple instructions to one SHO e.g. 'pass me a blue cannula'. Different SHO in each scenario. 3 scenarios with the same registrar wearing surgical mask, FFP3 or reusable FFP3 and microphone.

Measures:

Whisper down the lane:

- Did person 4 accurately report back the initial instruction?
- Subjective assessment on safety, difficulty and risk of drug error.

Treasure hunt:

- Number of times instructions given (minimum 8)
- Total time taken.
- Subjective assessment of safety and risk of drug error.

Results Whisper down the lane Table 1:

Scenario number	Instruction number 1 – passed on accurately?	Instruction number 2 – passed on accurately?
1	Yes	Yes
2	Yes	Yes
3	No	No

Whisper down the lane Table 2:

Scenario number	Did you feel there was a risk of a drug error? (N = 5) Yes/No (%)	Was communication difficult? (N = 4) Yes/No (%)	Was communication unsafe? (N = 5) Yes/No (%)
1	No (100%)	No (100%)	No (100%)
2	Yes (100%)	Yes (100%)	No (80%) Yes (20%)
3	Yes (100%)	Yes (100%)	Yes (100%)

Treasure Hunt Results:

Whilst wearing FFP3 100% of participants felt that communication was difficult, unsafe with increased risk of making a drug error. This fell to 0% when adding in the microphone with FFP3.

Table 3:

Scenario number	Total time taken:	Total number of instructions given:	Was prescription instruction correct?
1 surgical mask	1 minute 53 seconds	8	Yes
2 FFP	2 minutes 19 seconds	16	Yes
3 FFP + microphone	1 minute 18 secs	8	Yes

Conclusions 'Whisper down the lane' clearly demonstrated potentially significant communication difficulties whilst wearing reusable FFP3 masks. Realistically background noise from human factors such as the patient or relatives cannot always be controlled. Therefore finding an effective solution to ensure safe, patient care is vital. As a direct result of our project, our local trust safety group are investing in testing and finding solutions including microphones. We believe this demonstrates that even smaller, creative projects can have a positive impact on patient safety.

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BE FIT STUDY: BIOMARKERS RELATED TO WEIGHT AND LIFESTYLE IN YOUNG ADULTS

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Background The prevalence of obesity is rising, with a dramatically earlier onset. The 'seeds of adult disease' will manifest initially as pre-clinical abnormalities in critical organs such as the liver, heart, and systemic vasculature. However, estimates of obesity-related disease in younger adults are unreliable owing to the lack of effective screening measures. Clinical practice relies primarily on body mass index (BMI), family history, and blood tests, often neglecting to consider or address modifiable lifestyle factors. Magnetic Resonance Imaging can be used as a fast and accurate screening tool that can identify individuals at risk, even at an early stage when the disease is still reversible.

Objectives This is a feasibility study to enable future research on the deleterious effects of modern lifestyles in young persons aged 16–25 years. We will explore the inter-relationship between *lifestyle* (modifiable factors including physical activity, diet and sleep pattern) and *general health* (including liver and cardiovascular health, and body composition).

Methods Twelve participants, 4 female, 8 male; mean age 21.5 ± 2.8 years; BMI 28.6 ± 4.4 kg/m²; 4 had a BMI within the normal range, 8 were either obese or overweight (BMI >25). Each participant attended two sessions. In the first session, they underwent an oral glucose tolerance test, liver function tests, and a VO_{2max} measurement. Between the two sessions their physical activity was monitored for a week using a wrist monitor, and they completed a screentime and diet diary. Finally, liver and cardiac structure and function were assessed using MRI.

Results All of those with normal weight did the recommended amount of physical activity each week (120 minutes). Half of those overweight did their recommended amount of physical activity, whereas 4/5 of those characterised as obese did the recommended amount of physical activity. All participants within the normal BMI group had results within the normal range for all experimental measures. However, individuals within the overweight and obese range had evidence of decreased insulin sensitivity, increased cholesterol, and increased liver fat. We gathered positive feedback from all participants that the protocol was appropriate for this age group.

Conclusions The feasibility study demonstrates that we can recruit and retain participants and it possible to identify sub-clinical pathological changes in young people. Following this successful feasibility study, we are now recruiting to a larger, comprehensive study to disentangle the effects of individual factors that contribute to poor cardio-metabolic health. We hope to identify major modifiable risk factors that may guide future clinical practice to prevent progression of disease into adulthood.

British Association for Community Child Health

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IMPACT OF COVID-19 PANDEMIC ON THE DEMOGRAPHIC VARIANCE OF CHILDREN WHO ENTER CARE

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Background Impact of Covid-19 pandemic on the demographic variance of children who enter care

Objectives To consider the possible influence of the Covid-19 pandemic on the 30% increase of children becoming Looked-after (LAC), by exploring the demographic variance between the cohort of LAC in the first quarter (Q1)-2019/20 and (Q1)-2020/21.

Methods Comparing age, gender, ethnicity, sibling groups and reasons for entering care data of the cohort of 46 children who entered care in Q1-2019/20 directly with the 66 in Q1-2020/21.

Results 1) Ages of children entering care

There is a 6% reduction in the number of children <1 year entering care, overall increase for all the children aged between 1–15 years; with an extra 10% for the 2–3 year group. There is a 10% reduction of 16+ years in Q1-2020/21. Also note a 14% reduction of UASC entering care between Q1-2019/20 and Q1-2020/21.

2) Gender ratio

	Q1-2019/ 20	Q1-2020/ 21
Male	70%	53%
Female	30%	47%

The 70% male preponderance is explained by 7 male UASC. The ratio for Q1-2020/21 is typical.

3) Ethnicity

	Q1-2019/20	Q1-2020/21
White British	54%	56%
Asian	4%	3%
Black	11%	4%
Dual Black/White	13%	8%
Dual Asian/White	0%	4%
Other	4%	1%
Dual-other	4%	3%
Gypsy/Roma	2%	12%
White	2%	8%
White/non-European	6%	1%

4) Sibling group size:

	Single Child	Siblings- 2	Siblings- 3	Siblings- 4	Siblings- 5	Siblings- 6	Siblings- 7
Q1-2019/ 20	76%	17%	7%	0%			
Q1-2020/ 21	42%	15%	14%	18%	0%		11%

5) Percentage increase:

Single Child	Sibling Groups-2	Sibling Groups-3	Sibling Groups-4	Sibling Groups-5	Sibling Groups-6	Sibling Groups-7
-22%	+22%	+100%	+200%	0%		+100%

6) Reasons for entering care:

	Q1-2019/20	Q1-2020/21
Neglect	43%	44%
Sexual Abuse	9%	6%
Emotional Abuse	0%	3%
Physical Abuse	9%	3%
Parental Substance Misuse	0%	4.5%
Domestic Abuse	11%	14%
Family in Acute Stress	0%	1.5%
Parental Illness/Disability	0%	3%
Family Dysfunction	2%	1.5%
Socially Unacceptable Behaviour	4%	4.5%
Absent parenting	2%	1.5%
UASC	15%	1.5%
Homelessness	4%	3%
Child Illness/Disability	0%	9%

Conclusions The 30% increase of LAC in Q1-2020/21 at the start of the pandemic compared to Q1-2019/20 can be ascribed to a rise of admission into care of children aged 1–15 years, with a 10% increase for 2–3 years olds. The reduction of 16+ years LAC maybe linked to improved