

CAREERS

WHY I... make art

Ophthalmologist Katherine McVeigh tells **Abi Rimmer** how she has incorporated her interest in the eye into mandala inspired art pieces

"Making art helps me to relax and manage

the stress of the day, and allows me to create a space for exploration of ideas without rules or expectations," says ophthalmologist Katherine McVeigh. "It's something very different from the day job."

McVeigh has enjoyed arts and crafts projects since childhood, but it was a career in medicine that she gravitated towards. "My parents are both doctors and, although I was always aware of how busy they were, I saw how rewarding they both found the profession," she says.

While studying medicine at Newcastle University, McVeigh enjoyed the practical aspects of the training and found she leaned towards a surgical specialty.

"The intricate nature of eye surgery captured my interest and seeing generally high levels of satisfaction among both patients and doctors during a house officer job, I was encouraged

HOW TO GET INTO DRAWING

- Find something that motivates you
- Start with an idea but don't be defined by it
- Find inspiration in everyday life
- When making notes, make sketches
- Don't be too critical. Everything takes practice



MARKUS WUTZHOFFER



Mind by Katherine McVeigh (above)

"Having always enjoyed old medical art representing the eye, I sampled a range of anatomical and histological illustrations from archived ophthalmology images between 1850 and 1935," she explains. "These were collaged using image editing software and a drawing pad to create compositions mirroring the technical structure of the eye in an abstract style."

Her artwork entitled *Mind* (pictured) was inspired by the individuality and remarkability of the iris. To create it, images portraying the iris, ciliary body, and choroid were sampled and reconstructed in concentric rings to create a novel interpretation of the ocular uveal tract—the vascular middle layer of the eye.

While her normal audience is friends and family, McVeigh recently received an award for a photo showing an abstract representation of tunnel vision at the Royal College of Ophthalmology annual congress.

Rather than focusing on a specific goal, however, McVeigh enjoys the process. "I try not to put pressure on myself to produce a certain outcome, but more to learn and explore," she says. "Seeing development in these processes over time is rewarding and, every once in a while, making something that you want to give as a gift or hang on the wall is a satisfying feeling."

Abi Rimmer, *The BMJ*

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towards the eye world," she says. "The continuing evolution of imaging techniques and devices keeps a dynamic pace of development within the specialty and makes things interesting. And, of course, the eyes are a beautiful aspect of the body. It's hard to complain about having to look at them every day."

McVeigh struggled to find time for art while at university, but her interest was sparked again when she moved to the Severn Deanery during her specialty training. "Living in Bristol—a city renowned for its artistic output—and finding myself inspired by my artistic partner, friends, and colleagues, I was encouraged to start creative projects again," she says.

After completing her training, she moved to Germany and, after learning the language, started work as an ophthalmologist in Berlin. In addition to her day job, she has explored a range of artistic media over the past few years, from drawing, painting, and photography to digital designs and animation production.

It was while travelling in Asia that she developed an appreciation for the mandala. "Not only are these geometrical configurations beautiful, but they also hold deeper symbolism of spirituality and connection," McVeigh says. To her, the design and construction displayed in mandalas resembled the eye, and she decided to try to combine these concepts.

Effectiveness of hospital clowns for symptom management in paediatrics

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Objective To evaluate evidence from randomised controlled trials and non-randomised controlled trials on the effectiveness of hospital clowns for a range of symptom clusters in children and adolescents admitted to hospital with acute and chronic conditions.

Design Systematic review of randomised and non-randomised controlled trials.

Data sources Medline, ISI of Knowledge, Cochrane Central Register of Controlled Trials, Science Direct, Scopus, American Psychological Association PsycINFO, Cumulative Index to Nursing and Allied Health Literature, and Latin American and Caribbean Health Sciences Literature.

Study selection Randomised and non-randomised controlled trials were peer reviewed using the following eligibility criteria: children and adolescents who were admitted to hospital for acute conditions or chronic disorders, studies comparing use of hospital clowns with standard care, and studies evaluating the effect of hospital clowns on symptom management of inpatient children and adolescents as a primary outcome.

Data extraction and synthesis Two investigators independently screened studies, extracted data, and appraised the risk of bias. Methodological appraisal was assessed by two investigators independently using the Jadad scale, the revised Cochrane risk-of-bias tool for randomised controlled trials (RoB 2), and the risk of bias in non-randomised studies (ROBINS-I) tool for non-randomised controlled trials.

Results 24 studies (n=1612) met the inclusion criteria for data extraction and analysis. Most studies were randomised controlled trials (n=13). Anxiety was the most frequently analysed symptom (n=13), followed by pain (n=9), psychological and emotional responses and perceived wellbeing (n=4), stress (n=4), cancer related fatigue (n=3), and crying (n=2). Five studies used biomarkers, mainly cortisol, to assess stress or fatigue outcome following hospital clowns. Most of the randomised controlled trials (n=11; 85%) were rated as showing some concerns, and two trials were rated with a high risk of bias. Most non-randomised controlled trials (n=6; 55%) were rated with a moderate risk of bias according to ROBINS-I tool. Studies showed that children and adolescents who were in the presence of hospital clowns, either with or without a parent present, reported significantly less anxiety during a range of medical procedures, as well as improved psychological adjustment (P<0.05). Three studies that evaluated chronic conditions showed favourable results for the intervention of hospital clowns with significant reduction in stress, fatigue, pain, and distress (P<0.05).

Conclusions These findings suggest that the presence of hospital clowns during medical procedures, induction of anaesthesia in the preoperative room, and as part of routine care for chronic conditions might be a beneficial strategy to manage some symptom clusters. Furthermore, hospital clowns might help improve psychological wellbeing in admitted children and adolescents with acute and chronic disorders, compared with those who received only standard care.

Systematic review registration PROSPERO CRD42018107099.



Hospital clowns, shown on the front cover of the September 1908 issue of *Le Petit Journal*²⁵

Introduction

Since the 1980s, clowns have become popular in hospital paediatric settings, such as acute and rehabilitation hospitals.¹⁴ The first modern register of hospital clowning was reported in September 1908 in the Parisian newspaper *Le Petit Journal* (figure).²⁵

Previous reviews and meta-analyses have assessed the effects of hospital clowns.¹⁸⁻²² However, these studies focused on acute conditions, and one review lacked a specific tool for a risk-of-bias analysis in the non-randomised controlled trials.¹⁸

In this systematic review we evaluated evidence from randomised and non-randomised controlled trials on the effectiveness of hospital clowns for a range of symptom clusters in children and adolescents admitted to hospital with acute and chronic conditions.

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WHAT IS ALREADY KNOWN ON THIS TOPIC

- Hospital clown intervention has been shown to have a positive effect on paediatric patient outcomes for acute conditions and during medical procedures

WHAT THIS STUDY ADDS

- Interaction with clowns during medical procedures, during induction of anaesthesia, in the preoperative room, and in chronic conditions might be a beneficial strategy to manage symptom clusters and improve psychological adjustment of children and adolescents in hospital compared with those in control groups with standard care
- Hospital clowns might contribute to improved psychological wellbeing and emotional responses in children and adolescents in hospital with acute or chronic conditions

Send in the hospital clowns Effectiveness for paediatric symptom management

Summary



Might be a beneficial strategy to manage some symptom clusters during medical procedures, induction of anaesthesia in the preoperative room, and as part of routine care for chronic conditions

Study design



Systematic review of randomised and non-randomised controlled trials

Data sources



24 studies total
13 randomised trials
11 non-randomised trials



1612 children and adolescents admitted to hospital for acute conditions or chronic disorders

Comparison

Intervention

Contact with hospital clowns and standard care

Comparison

Standard care only

Outcomes

Evidence for positive intervention outcomes by symptom

Symptom	% of studies, statistical significance
Anxiety	13 100%, $P \leq 0.05$
Pain	9 44%, $P \leq 0.05$
Emotional wellbeing	4 50%, $P \leq 0.01$ 50%, $P \leq 0.05$
Stress	4 75%, $P \leq 0.01$
Cancer related fatigue	3 67%, $P \leq 0.05$

Risk of bias by trial type

Randomised
Cochrane
RoB 2 tool

Low 0%
Some concerns 85%
High 15%

Non-randomised
ROBINS-I tool

Low 9%
Moderate 55%
Serious 36%



Methods

We searched eight databases from inception to 29 February 2020 for studies of children and adolescents who were admitted to hospital for acute conditions or chronic disorders, studies comparing use of hospital clowns with standard care, and studies evaluating the effect of hospital clowns on symptom management of inpatient children and adolescents as a primary outcome. Methodological appraisal of randomised controlled trials was assessed using Cochrane's risk-of-bias tool (RoB 2) and non-randomised trials using the risk of bias in non-randomised studies of interventions (ROBINS-I).²⁴ Most of the studies showed considerable methodological differences (sample size, data collection scheme, follow-up time points, type of symptom clusters, and severity and onset of the conditions (acute or chronic)). Therefore, the results were too heterogeneous and not suitable for meta-analysis.

Results

After eligibility and critical appraisal of the full texts of 31 records, 24 studies (13 randomised and 11 non-randomised controlled trials), comprising 1612 participants met the inclusion criteria for analysis.⁴⁶⁻⁶⁹ Anxiety was the most frequently analysed symptom ($n=13$; $P<0.05$ for all 13 studies) for admitted paediatric patients receiving clown intervention compared with those receiving only standard care. This was followed by pain ($n=9$; $P<0.05$ for four studies), psychological and emotional responses and perceived wellbeing ($n=4$; $P<0.05$ in two studies and $P<0.01$ for two studies), stress ($n=4$; $P<0.01$ for three studies), and cancer related fatigue ($n=3$; $P<0.05$ for two studies).

Most of the randomised controlled trials ($n=11$; 85%) were rated as showing some concerns (RoB 2), and two trials were rated with a high risk of bias. According to ROBINS-I, most non-randomised controlled trials ($n=6$; 55%) were rated with a moderate risk of bias.



Discussion

We found that the presence of hospital clowns as part of routine care for acute as well as chronic conditions might be a beneficial strategy to manage some symptom clusters. In addition, hospital clowns might contribute to the improvement of psychological wellbeing and emotional responses in children and adolescents admitted with acute as well as chronic disorders compared with those who received standard care.

Although randomised controlled trials predominated in our review ($n=13$), a considerable number of non-randomised controlled trials ($n=11$) were analysed. Well conducted randomised controlled trials remain the gold standard for assessing interventions, given that their design controls for both measured and unmeasured confounding variables. However, non-randomised controlled trials have increased exponentially in recent years, and these studies have large sample sizes, long follow-up periods, and advances in analytical approaches to control for confounding bias.^{72,73} Although non-randomised controlled trials provide different information from randomised controlled trials,⁷⁴ these methods can complement each other, and systematic reviews of both trial types are needed to provide a comprehensive assessment of a body of evidence.^{75,76}

Identifying and categorising the severity of domain specific flaws to assess the overall quality of non-randomised controlled trials requires the use of suitable instruments,^{24,76} such as ROBINS-I.²⁴ In our review, most studies ($n=6$)⁵⁰⁻⁶⁹ were rated as the moderate category according to ROBINS-I, and four⁴⁹⁻⁶³ were classified in the serious category.

One limitation of this systematic review was the heterogeneity of the studies regarding the data collection scheme, follow-up time points, participant grouping, heterogeneity of symptom clusters, and severity and onset of the conditions (acute or chronic). For this reason, quantitative assessments were not feasible.

As clinicians strive to minimise the psychological burden during the hospital admission process, they should be aware of the scientific evidence available to help them incorporate appropriate laughter and play into clinical practice.¹⁴ Children and adolescents who need to stay in hospital represent a special challenge for the healthcare system and health professionals, owing to the illness itself and the treatment process.^{110,115} In addition, these children and adolescents with acute or chronic disorders are also stressed by the separation from their parents, hospital environment, fear of painful treatments, and uncertainty of the treatment outcome.^{13,50}

ORIGINAL RESEARCH

Multicentre randomised controlled trial

Effect of therapeutic suggestions during general anaesthesia on postoperative pain and opioid use

Hartmuth Nowak,¹ Nina Zech,² Sven Asmussen,¹ and colleagues

Objective To investigate the effect of therapeutic suggestions played to patients through earphones during surgery on postoperative pain and opioid use

Design Blinded randomised controlled study.

Setting Five tertiary care hospitals in Germany.

Participants 385 of 400 patients consecutively recruited from January to December 2018 who were to undergo surgery for 1-3 hours under general anaesthesia. In the per protocol analysis 191 patients were included in the intervention group and 194 patients in the control group.

Intervention The intervention comprised an audiotope of background music and positive suggestions based on hypnotherapeutic principles, which was played repeatedly for 20 minutes followed by 10 minutes of silence to patients through earphones during general anaesthesia. Patients in the control group were assigned to a blank tape.

Main outcome measures The main outcome was dose of opioid administered by patient controlled analgesia or nurse controlled analgesia within the first postoperative 24 hours, based on regular evaluation of pain intensity on a numerical rating scale (range 0-10, with higher scores representing more severe pain).

Results Compared with the control group, the intervention group required a significantly ($P=0.002$) lower opioid dose within 24 hours after surgery, with a median of 4.0 mg (interquartile range 0-8) morphine equivalents versus 5.3 (2-12), and an effect size (Cohen's d) of 0.36 (95% confidence interval 0.16 to 0.56). The number of patients who needed opioids postoperatively was significantly ($P=0.001$) reduced in the intervention group: 121 of 191 (63%, 95% confidence interval 45% to 70%) patients in the intervention group versus 155 of 194 (80%, 74% to 85%) in the control group. The number needed to treat to avoid postoperative opioids was 6. Pain scores were consistently and significantly lower in the intervention group within 24 hours after surgery, with an average reduction of 25%. No adverse events were reported.

Conclusions Therapeutic suggestions played through earphones during general anaesthesia could provide a safe, feasible, inexpensive, and non-drug technique to reduce postoperative pain and opioid use, with the potential for more general use. Based on the finding of intraoperative perception by a considerable number of patients, surgeons and anaesthetists should be careful about background noise and conversations during surgery.

Trial registration German Clinical Trial Register DRKS00013800.



Introduction

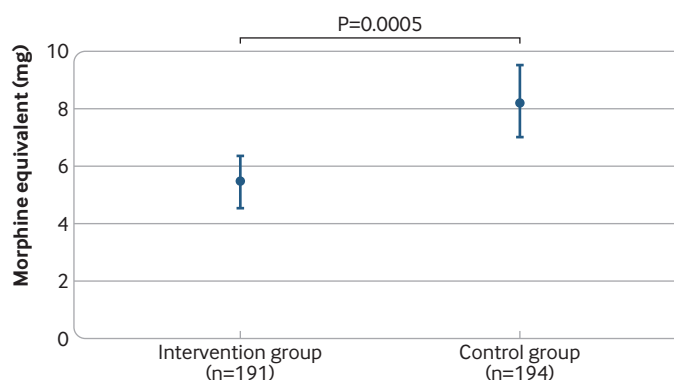
Intraoperative awareness has been reported in a small number of patients and can lead to severe sequelae, such as post-traumatic stress disorder.⁴⁻⁶ Because of the mainly negative effects of such intraoperative perceptions, attempts have been made to avoid “inadequate” anaesthesia.^{8,9} In contrast, several studies have tested the use of taped therapeutic suggestions during general anaesthesia, summarised in a recent meta-analysis.¹⁰⁻¹³

Adequate analgesia is a major goal and challenge of postoperative care, both for patients' comfort and healing and for recovery and outcome. Opioids are primarily used for this purpose, although these drugs have severe side effects and complications.¹⁴ Therefore supplementary non-drug approaches as part of a multimodal opioid sparing regimen are needed. We hypothesised that an audiotope of therapeutic suggestions played to patients during surgery would lead to a reduced postoperative need for opioid drugs.

Methods

Patients intended for surgery under general anaesthesia for 1-3 hours in five tertiary care hospitals in Gwere randomly assigned to intervention or control group. After the patient had been anaesthetised and intubated, the responsible anaesthetist connected one of two identical MP3 players marked A or B to earphones in the patient's ears and started to play the audio, exclusively during anaesthesia. In the intervention group the audiotope contained background music and repeated therapeutic suggestions. Patients in the control group received an audiotope with no auditory output. All patients were periodically assessed for postoperative pain on a numerical rating scale (NRS, range 0-10).²⁰ Those who scored 3 or more received an intravenous opioid bolus (piritramide) administered either by the attending nurse (nurse controlled analgesia) or by the patient (patient controlled analgesia).

Our primary endpoint was requirement for opioids within 24 hours after surgery. For generalisability, we calculated morphine milligram equivalents (MME).^{23,24}



Postoperative dose of opioids within 24 hours after surgery. Data are calculated by bootstrapping owing to non-normally distributed outcome variables. Doses are in morphine milligram equivalents to account for different types of opioids

Results

A total of 400 patients were recruited and randomised (80 in each study site) from January to December 2018. In the per protocol analysis, 191 patients in the intervention group and 194 patients in the control group were included.

At baseline, duration of surgery, preoperative pain, intraoperative use of analgesics, and surgical procedures were equally distributed between the groups ($P=0.32$).

Outcome measures

Opioid use in the first 24 postoperative hours was significantly lower in intervention patients compared with control patients (figure and table). On average, the dose of opioids was reduced by 2.8 mg MME, corresponding to a saving of 34%. Significantly fewer patients in the intervention group than control group needed opioids within 24 hours postoperatively: 121 out of 191 (63%) v 155 of 194 (80%) participants, corresponding to a reduction in patients requesting opioids by 26% and a number needed to treat of 6 to avoid postoperative opioids.

Although patients in both groups had similar pain levels preoperatively, the postoperative course of pain differed between the groups. The first postoperative evaluation of pain on admission to the post-anaesthesia care unit, before any postoperative opioid was given, showed significantly lower mean pain scores in the intervention group (1.4 (SD 2.2) v 2.2 (2.7), $P=0.002$). The average pain score remained 25% lower in the intervention group, in contrast with the control group with a score above the threshold of 3 (3 being the common threshold for pain treatment). Moreover, despite a significantly higher opioid consumption in the control group, after 24 hours 61% of these patients had a postoperative pain score of 3 or more, indicative of ongoing clinically relevant pain and need for analgesics, compared with 42% of patients in the intervention group ($P<0.001$).

Discussion

This study found a statistically significant reduction in use of postoperative opioids in patients who received therapeutic suggestions by audiotape during surgery. Furthermore, the number of patients who requested and received opioids was significantly lower after the intervention. A mean saving of 2.8 MME for each patient might seem unimportant; however, in most pain studies the focus is generally on relative saving and not the absolute dose, and an opioid dose reduction of 30%, as reported here, is considered relevant.¹⁶ Moreover, a mean saving does not reflect benefit for individual patients.²⁷ The saving of about 33 patients from exposure to postoperative opioids is of clinical interest. Pain intensity also needs to be considered, as the two variables pain and analgesia are interdependent and inseparable. Starting from admission to the post-anaesthesia care unit to 24 hours after surgery, postoperative pain was significantly lower in the intervention group.

A limitation of our study is that the contribution of factors such as the background music remains unclear.³⁴ Moreover, a beneficial effect can be expected from shielding through earphones against intraoperative noises and careless conversations, including negative suggestions.¹⁹ The intraoperative suggestions might have an analgesic effect postoperatively but might also modulate the development of pain during surgery.

Based on our finding of intraoperative perception, surgeons and anaesthetists should be careful about background noise and conversations during surgery and instead use the patient's perception for positive suggestions.

With a saving of one third of postoperative opioids and noticeably fewer patients using opioids, the observed effect of the tested non-drug intervention not only reached statistical significance but is also of clinical interest.

See full paper on bmj.com for affiliations

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WHAT IS ALREADY KNOWN ON THIS TOPIC

- Perception during general anaesthesia has been reported, mostly with negative consequences such as with "intraoperative awareness"
- A recent meta-analysis of older trials indicates improvements in postoperative recovery

WHAT THIS STUDY ADDS

- This study found a reduction in postoperative pain and need for opioids after delivery of therapeutic suggestions during surgery, with a number needed to treat of 6 to avoid postoperative opioids
- The underlying intraoperative perception suggests that surgical teams should be aware of noise or negative conversations during surgery
- Therapeutic suggestions during surgery could provide a safe, feasible, and non-drug technique to reduce postoperative pain and opioid use, with the potential for more general use

Requirement for analgesia and pain and after surgery in participants assigned to therapeutic suggestions by audiotape during surgery (intervention) or to a blank audiotape ($n=385$). Values are medians (interquartile ranges) unless stated otherwise

	Intervention group ($n=191$)	Control group ($n=194$)	Absolute difference (95% CI)	P value*	Cohen's d (95% CI)	NNT
Postoperative opioids:						
MME†	4.0 (0-8)	5.3 (2-12)		0.002	0.36 (0.2 to 0.6)	
None, No/% (95% CI)	70/37 (30 to 44)	39/20 (157 to 26)	16.5 (8 to 25)	<0.001	0.46 (0.2 to 0.7)	6.0
No high dose (MME≥10), No/% (95% CI)	153/80 (74 to 86)	129/66 (59 to 73)	13.6 (5 to 22)	0.014	0.39 (0.1 to 0.7)	7.3
Postoperative non-opioids:						
% of MDD‡	50 (6-100)	75 (25-100)		0.0135	0.25 (0.1 to 0.5)	
Postoperative pain, NRS (01-10):						
Average within 2 hours	2 (1-3)	3 (1-4)		<0.001	0.40 (0.2 to 0.6)	
Maximum within 24 hours	4 (3-6)	5 (4-7)		<0.001	0.45 (0.3 to 0.7)	
Patients with NRS <3:						
At 0 minutes (admission to PACU), No/% (95% CI)	145/76 (70 to 82)	122/63 (56 to 70)	13.4 (4 to 23)	0.003	0.35 (0.1 to 0.6)	7.7
Average within 2 hours, No/% (95% CI)	119/62 (55 to 69)	84/43 (36 to 51)	19.0 (9 to 29)	<0.001	0.43 (0.2 to 0.7)	5.3
At 24 hours, No/% (95% CI)	110/57.6 (50.2 to 64.7)	75/38.7 (31.8 to 45.9)	18.9 (9.1 to 28.7)	0.001	0.42 (0.2 to 0.7)	5.3

NNT=number needed to treat of pain; MME=morphine milligram equivalents; MDD=maximum daily dose; NRS=numerical rating scale; PACU=post-anaesthesia care unit.

*Mixed effect.

†Intravenous morphine=1, piritramide=0.7, tilidine=0.2, oxycodone=0.8, 23 24

‡MDD calculated to correct for different non-opioid analgesics with various half-lives (metamizole=4000 mg, paracetamol=4000 mg, ibuprofen=2400 mg, diclofenac=150 mg, etoricoxib=120 mg, from information provided by manufacturers).



I believe in Father Christmas: he and his team have got the human factors approach sorted

The busiest 24 hours in Father Christmas's year approaches as he and his helpers prepare to deliver presents around the world. A seemingly impossible task, for him it's all in a night's work, facilitated by applying human factors in many areas. However, there is always room for reflection, learning, and improvement

Father Christmas is possibly unique in having 364 days to prepare for an important job, and could be accused of taking work-life balance to the extreme.

Even so, the Christmas task presents a considerable challenge, since staying awake for more than 18 hours leads to deterioration in cognitive function similar to being twice over the UK legal alcohol limit for driving.

Quite how he manages to function safely at all remains a mystery given the customary glass of wine, sherry, or spirits left out for him by many households. It would be much better to leave a glass of water, as even small deficits in fluid balance can reduce physical performance and mental function, not to mention the unprofessional practice of drinking alcohol while on duty.

Environmental factors, humidity, and temperature influence rapidity of fluid loss, which can be further accentuated if Santa is wearing full personal protective equipment this year.

Staying well at work

Looking after ourselves while working, including making provisions for adequate hydration and nutrition, is sometimes overlooked but is very important. Eating is not an issue for Father Christmas as he understands the importance of having breakfast before setting off.

While the indulgence of regular mince pies undoubtedly maintains his energy levels during his flight, this cannot be condoned. Ideally he should be eating a more balanced diet

He appreciates the importance of good situational awareness, effective team working, and forward planning

because high carbohydrate and processed foods do not satisfy hunger, but raise insulin levels and paradoxically can lead to poorer performance. He does, however, recognise that regular rest breaks during periods of low workload (for example, while flying over empty oceans and deserts) improve overall performance and sleigh flight safety.

Managing the load

While Father Christmas should be commended for his exemplary engagement with checklists, especially as he checks them twice, his verbal communication skills could be improved. His familiar "ho ho ho" usually represents the sound of a deep laugh, but the Oxford English Dictionary also cites its use to show surprise.

With such a busy workload, high expectations, and the fear of widespread disappointment in the event of an error, the pressure on Father Christmas to deliver a superlative service must be immense. However, he appreciates the importance of maintaining good situational awareness, effective team working, and forward planning. He is fortunate to have vast amounts of SPA (Santa Preparation Activity) time throughout the rest of the year, enabling him to think about the many "what if?" scenarios.

In this way, he should not suffer from any unexpected startle reactions, which could raise the likelihood of a "Christmas Never Event" such as wrong stocking site delivery. When something does

not seem quite right, Father Christmas will also know that the best way to regain both individual and team situational awareness is to stop the sleigh if safe to do so, step back, and reassess the situation with the whole team. However, Father Christmas himself is not infallible. There are many published Christmas card examples of him losing situational awareness, falling off roofs, and getting stuck in chimneys.

Valuing the team

Although no evidence exists that he engages in a formal team brief, it would be naïve to think that Father Christmas does not take this vital aspect of work seriously. Important elements include introductions and confirming names, especially since his team works together infrequently.

Agreeing roles during a possible crisis is good practice, as is actively lowering hierarchy, and valuing all members irrespective of seniority, sleigh pairings, or characteristic features (such as a shiny nose). It is also important to empower team members to be able to raise concerns without fear. Terms such as "Santa's little helpers" could be regarded as derogatory and subordinate.

When the job has finally ended, it is likely that the team will have a debrief to confirm what went well, and what, if anything, could be improved for next Christmas. The power of thanking all on "team Christmas" cannot be emphasised enough.

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