IMSH Conference 2019

The International Meeting on Simulation in Healthcare (IMSH) was held for the first time in San Antonio, at the Henry B. Gonzalez Convention Centre, from 26 to 30 January 2019.

There were approximately 3090 attendees (not counting healthcare vendors and exhibitors) from 64 countries; and 1354 presenters.

For the first time, sessions were live-streamed.

San Antonio is a military town with major hotels adjacent to the convention centre. It is also home to The Alamo historic site.

SATURDAY 26 January

PRESIDENT'S DIAMOND BALL

At this inaugural black-tie event, acknowledgment was made of:
- Simulation centres that achieved SSH accreditation
- Those that received CHSE, CHSE-A and CHOS certification
- New inductees into the SSH Academy
    - Yue Dong
    - Thomas Dongilli
    - Chad Epps
    - Jeffrey Groom
    - Samsun Lampotang
    - Connie Lopez
    - Beth Mancini
    - Geoff Miller
    - John O'Donnell
    - Richard Riley
    - Mary Kay Smith

SUNDAY 27 January

Outgoing speech by Joe Lopreiato, 2018 IMSH President.
Incoming speech by KT Waxman, 2019 IMSH President.
- There's a lot of work to do and SSH has a lot of jobs for everyone
- We are all sim leaders

- We need to talk the talk about the value and return on investment
- @ktwaxman (Twitter)

Pioneer in Simulation Award
Dr Ronald M Harden
General Secretary; AMEE, Editor, Medical Teacher; Professor of Medical Education

Opening Plenary Session and Keynote Address: Optimism Bias, presented by Tali Sharot
Future thinking: why change is hard and what to do about it.

Keynote speaker is the author of "The Influential Mind" and "The Optimism Bias".

Scans of the brain that light up when thinking about the future are the same areas as if you think of the past. (Addis et al. 2007). Thus, imagination is shaped by the past. Maybe learning in the future will be easier. We tend to think of the future in a positive light. The reward centre is lit up for the future thinking.

Four questions highlighting the OPTIMISM BIAS:
1. Will you be married in 5 years? 75% optimistic. "Re-marriage is a triumph of optimism over experience" (Pope)
2. Will your situation be better?
3. Will you be better financially
4. Will your family do well?

Optimists live longer, get over illnesses quicker.
Predictions are constrained by wishful thinking.
CONFIRMATION BIAS. We tend to find evidence that supports us being correct. We rarely find evidence that we are wrong. Experiment with MRI of pairs of people, when 2 peoples agreed, the brain lit up but when the 2 people being scanned disagreed, the brain shut down. When they could not see what the other person was thinking, the brain was a little 'positive'.

How to create change:
1. Establish common ground. (People will tend to agree if the good news that what all agree on)
2. Highlight opportunity for progress rather than decline. (People learn more from positive information than negative information).
3. Immediate rewards. Example of handwashing rates: open camera vs. screen that collated handwashing rates with positive message. Highlight good outcomes over negative consequences. A reward can be as simple as positive feedback.
4. Social incentives. We want to know what other people are doing and we want to do it better. Thus, 10% of organ waiting list people will reject organs that have been refused by another recipient!
5. Expand agency. Example of electricity bill. Sense of control. You can get a smiley face if you save more electricity. Therefore, give people choices. Gives people a sense of control.
6. Consider mental state. Experiment: when people are stressed, the optimism bias is eliminated! Even if the disaster occurs around the other side of the world, people change

their behaviours and lose their positive outlook. Too much choice is not always good – experiment with choosing 1 of 60 jams.

7. Enhance anticipation. Happiest day is the day before vacation. People prefer to get monetary rewards immediately but experiential rewards in a few days' time.
8. Awareness.

SSH Academy Fellows – Business Meeting

Many changes to the by-laws – various rules moved from the constitution to the operating procedures manual.

MONDAY 28 January

Plenary Session and Lou Oberndorf Lecture on Innovation in Healthcare Simulation: Sir Ken Robinson (42759)

*Called "one of the world's elite thinkers on creativity and innovation" by Fast Company magazine, Sir Ken Robinson has received numerous awards and recognitions for his ground-breaking contributions. He was included in **Thinkers50** list of the world's leading business thinkers and has been named one of TIME/Fortune/CNN's Principal Voices. In 2003, he received a knighthood from Queen Elizabeth II for services to the arts. His 2009 book, The Element: How Finding Your Passion Changes Everything, is a New York Times best seller and has been translated into 21 languages. A 10th anniversary edition of his classic work on creativity and innovation, Out of Our Minds: Learning to be Creative, was published in 2011. 35 million downloads of his Ted Talks. "I am not a doctor or technologist"*

Human beings have capacity to learn one or more languages automatically. They are not taught. People love to learn but not all like school. A school is a community of learners. It is no longer true that if you go to school, you will get a job. Globally, children spend less than 1 hour outdoors each day unsupervised. Prisoners spend more time with supervised "play".

Creativity is the application of imagination! Creativity has outcomes. Otherwise it is just imagination. We all occupy virtual realities.

Tools:
1. Assist our ability to be creative e.g. lathe, plough, etc.
2. Transformative technologies (e.g. telescope) allowed us to extend our capability and opens our minds to other possibilities. They also feed off other technologies.

Every age thinks it is at the end of technology and they can't predict the newer technologies and their impact.

Important to:
1. Retain the personal touch and not dehumanise people
2. Be on guard to avoid to reduce people to data points, and to remind politicians of this.

See "The Geography of Thought". Many people shown a picture of a tiger; Americans said tiger, Asians said jungle with a tiger. Islamic art rarely features humans, Asian art has small figures, Western art has frequent portraits. We need to challenge of field of view.

See "**The Element**", by this speaker. Finding your passion and making it your life.
Talent is often buried deep. Paul McCartney and George Harrison were seen as talentless in school. Same with Elvis Presley.

Quiz – see the movie – how to get the peanut out of the hollow tube. (Dutch video). Thus, we may fail to solve problems even when the solution is in plain sight.

The diagnosis of ADHD is inflated when the pupil is encouraged to move around.

Oklahoma experiment – pre-primary school were placed in a nursing home. Elders read to these kids. Reduced doses of mind-altering drugs among the elderly folk. They are also living longer. Kids also learn about death.

See "**Alive Inside**" movie that shows how music reinvigorates lost memories in dementia patients.

Modern education must re-engage with students and not let technology rob the learners from the human touch. Allow creativity in a nurturing environment!

Simulation in Healthcare Workshop for Peer Reviewers (39456)
Track: Research Methods.

Sharon Muret-Wagstaff, MPA,PhD1; Mark Scerbo, PhD, FellowofSSH2; Jeffrey Cooper, PhD, FellowofSSH3; David Gaba, MD, FellowofSSH4; Aaron Calhoun, MD, FAAP,FellowofSSH5; Elaine Meyer, BSN,MA,MSN,PhD, RN6; Marc Auerbach, MD,MS7
1Emory University School of Medicine, Atlanta, GA, US; 2Old Dominion University, Norfolk, VA, US; 3Center for Medical Simulation, Boston, MA, US; 4Stanford University and VA Palo Alto, Los Altos, CA, US; 5University of Louisville, Louisville, KY, US; 6Boston Children's Hospital, Waltham, MA, US; 7Yale University School of Medicine, Milford, CT, US

This journal receives over 300 manuscripts/year.
See: Cheng A, Reporting guidelines for health care simulation research. **Simulation in Healthcare** 2016; 11 (4) 238-248. See: Sevdalis N, A joint leap into a future of high-quality simulation research. **Simulation in Healthcare** 2016 11 4 236-237.

ICMJE Guidelines for Authorship:
1. Substantial contribution
2. Drafting and revision
3. Final approval
4. Agree to be accountable

TIPS FOR REVIEWERS
1. Tell the Editor what you think in the confidential comments
2. DON'T make recommendations about publication in the comments to the authors

3. Tone: Consider what you would feel like if the authors knew your identity
4. Tone: Consider what you would feel like if you were the author
5. Start out with an open mind
6. Give as much advice as you can – but it's not your job to rewrite the paper
7. Provide feedback that is thoughtful, constructive, helpful, and actionable

Top reasons that reviewers accept manuscripts
1. Important, timely, relevant, critical, prevalent problem
2. Well-written manuscript (clear, straightforward, easy to follow, logical)
3. Well-designed study (appropriate, rigour, composition design)
4. Thoughtful
5. Sample size sufficiently large
6. Practical, useful implications
7. Accurate

Top Reasons rejected

1. Statistics inappropriate, incomplete
2. Overinterpretation of results
3. Inappropriate premise or methods

Get started
1. Accept or decline the invitation to review
   a. Respond quickly
   b. Fit for your area of expertise. Time available? Conflict of interest?
2. Summarize overarching strengths and concerns
3. Address strengths and weaknesses of each content area.
4. Address ethical considerations
5. Provide confidential comments to the Editor
6. Make a confidential recommendation to the Editor regarding recommendations.

Ethical issues
1. Authorship. All authors must have participated in the design, execution, and/or analysis. (See ICMJE Guidelines)
2. Duplicate, prior, or divided publication.
3. Human studies. IRB review including declaration of "exempt". Must describe consent and precautions.
4. Redundant publication.
5. Conflict of interest.

Watch a Doctor Get Sued: A Medicolegal Simulation (39022)
Michael Smith, MBA,MD, CPhys1; Bryan Baskin, DO, CPhys2; Marilena DiSilvio, BSN3; Denise
Ochsner Health System, New Orleans, LA, US; 2Cleveland Clinic, CLEVELAND, OH, US; 3Elk and Elk,
Cleveland, OH, US; 4Sutter Law, Cleveland, OH, US

This was a simulation of an actual case of a missed MI in an Emergency Department. The patient was discharged and subsequently died at home.

An Emergency Physician sat between two opposing attorneys and the history and investigations were reviewed, to the best of his knowledge.

Step 1. Taking a deposition of the event by the ER doctor and a lawyer. He uses his notes. There were gaps in the medical entry. A 2nd ECG was taken but it could not be located and the initial ECG was essentially normal. An MI could NOT be ruled out.

Step 2. The doctor was quizzed about his normal practice; including use of college / society guidelines, serial ECGs, serial troponins. Teams: Pre/Debriefing and Patient Care.

Hot Topics: Large Scale Simulation (42504)

Matthew Slimovitch, MDCM1; Jill Pence, EdD,MSN, CHSE,CNE, RN2; Ilana Bank, MDCM, FAAP,FRCPC3; Joseph Yaksich, AS,BSN,MS, APRN,CHSE, NP,RN4; Madhavi Suppiah, BA5; Kelley Sava, MS, APRN, CPNP6

1Université Sherbrooke, Sherbrooke, QC, CA; 2Samford University, Birmingham, AL, US; 3McGill University, Montreal, QC, CA; 4Concordia University, Ann Arbor, MI, US; 5SINGAPORE HEALTH SERVICES, Singapore, Singapore, SG; 6Advocate Aurora Health, Downers Grove, IL, US

This is how we do it.

1. 2 x 3-hour shifts over 9 hours
2. 2 days
3. >250 students
4. 6 programs
5. All nursing, allied health (no doctors, but PAs acting as doctors)
6. 27 SPs, 5 high-fidelity mannequins
7. 24 cases
8. ER, Med-Surg, ICU, L&D, Paediatrics, Home care, Pharmacy
9. Patients rounds during the simulation

Planning was 9 months. Case development. SP training. Pre- and de-briefing, etc.
Use of proprietary "Canvas" LMS (learning management system) https://www.canvaslms.com/

Benefits

1. Positive learning environment to implement and practice IPEC competencies
2. Increased student confidence in teams
3. Improved reflection and collaboration

Lessons learned

1. Longer shifts and unfolding were beneficial
2. Clarification with all participating depts on goals of sim
3. Increasing patient numbers
4. Aim to recruit medical participants from a neighbouring medical school

Speaker Kelly Sava, Aurora Health, was time wasted. Spoke on the history of their simulation centres across many hospitals in 2 states.

Concordia University Michigan: 270 hours of simulation before RN graduation.

Description of scenario - chemical warfare agent attack in the university chapel (spraying water and people falling down).

Slimovitch. Canadian experience. See Prehospital and Disaster Medicine …
Canadian Ministry of Health suggests that it was unwise to wait for a "CBNe" disaster to prepare for one. Learn to decontaminate patients before entry to hospital to avoid contaminating your health workforce.

Montreal Experiment using **GloGerm** randomly applied to SPs and measure their decontamination and using UV light to measure decontamination. Usually around 80% decontamination. Use the armed forces to assist with such simulations because many countries have annual simulations.

SSH Business Meeting (SSH Members Only)

Presentations made for service to SSH.
Financial report – about USD 5 million in the bank. Financial loss at last IMSH meeting in Los Angeles. Many bylaws being updated with many 'laws' being moved to policy section.

Healthcare (Vendors) Exhibition

The exhibition area remains a well-patronised area where posters are displayed, conference meals are served and several hundred exhibits are on display. In addition to standard mannequins, training devices and related technologies, there are an increasing number of companies that seek to plan, manage and integrate simulation education programs into one's existing education in healthcare; at a price of course.

A trauma dog mannequin allows training for first responders (police, military) when support dogs are shot, knifed or otherwise injured. Tracheal intubation is possible.

Military mannequins for injuries remained very popular with many exhibitors in this lucrative area.

TUESDAY 29 January

Presidential Citations:
1. Christine Park
2. SSH Certification Council
3. SSH Accreditation Council

Tuesday Plenary Session and Michael S. Gordon Center Lecture on Medical Education: The Future of Healthcare (and Health), presented by Joel Selanikio (42760)

Advances in information technology stand to revolutionize medical practice — but also to shift a larger portion of our health care out of the "healthcare" system. Simulation systems will increasingly need to recognize this change, addressing the traditional model of doctors in clinics providing care, but also developing tools for the minute clinic, the nurse practitioner, the pharmacist, and most importantly the smartphone-equipped member of the public.

CEO of MAGPI   joel@magpi.com   @jselanikio

"I skate to where the puck is going to be, not where it has been"; Wayne Gretsky – as quoted by Steve Jobs.

Smartphones are examples of a technology that is <u>sustaining</u> (allows us to use taxis, ride the subway) but is also <u>disruptive</u> (reduced usage on public transport).

See "**The Innovator's Dilemma**" (Clayton Christensen) as it may be the most important business book written in 50 years. New technologies cause great firms to fail! So, think about Nurse Practitioners vs. Doctors.

The US FDA is <u>disrupting</u> healthcare by reducing 2.5 million annual visits to a doctor by simply making more drugs available OTC. What's next? Antibiotics? Will you need an app to allow drug prescription? Don't be too quick to dismiss such changes that can have major consequences – some that you have not even considered.

We are recording 5 exabytes of data every day. All the data recorded from ancient Egypt to Beyonce is also 5 exabytes. (exabyte = billion gigabytes). Data is the new oil.

Image recognition (for autonomous tanks) caused billions to be spent without a result.
How to distinguish between a chihuahua and a blueberry muffin. Google images now recognises images better than humans do.
See **The New Yorker**: AI vs. MD (April 2017)
ResApp in smartphones listens to kids coughs and diagnoses asthma.
ChatBot on the smartphone is as good as a therapist.
Geoff Hinton says stop training Radiologists now because machine learning can do it better already.

Big hospitals are being edged out by mini-health centres and by consumers themselves (by using apps, available information and available medications and treatments). Many disorders no longer need to see specialists, they can see generalists or no-one.

Biometrics and Wearables to Improve Your Sim Experience (39079)
Speakers: Robert Parker, DO, FAAP1; Nicholas Slamon, MD, FAAP2
1Baystate Children's Hospital, Granby, CT, US; 2Nemours, Wilmington, DE, US

Biometrics is the science of using distinctive, measurable characteristics to label and describe individuals. New wearable technology enables users to observe participant biometrics (HR, RR, HRV) in real time. This course will detail how one can utilize participant biometrics within the context of simulation scenarios to individualize the participant experience, improve knowledge retention, and explore many other possibilities.

See QR code for PowerPoint:
https://www.dropbox.com/s/0o2uvd8fikbbf9h/IMSH%20Presentation%203.pptx?dl=0

This technology movement started in the sports domain.
Biometrics is the use of measurement techniques to identify unique features of individuals (fingerprints, retinal images…).

Salivary cortisol is the gold standard. But it is expensive and somewhat invasive. Alpha amylase is also used.
Heart rate – as it increases, there are adverse events, with tremor, slowed thinking, narrowed focus, bowel problems, etc.
Heart rate variability (HRV) – with plot shape SD1 and SD2 – indicate either sympathetic or parasympathetic predominance. HRV usually requires 5 min to establish a baseline.

Not a lot of correlation between HR, STAI (state trait anxiety index), HRV, cortisol, etc and performance.

Psychometric Tests
1. STAI (6 questions in the shortened version)
2. NASA Task Load Index (20 questions)

Cortisol Assay
1. Point of care testing around $55 per assay

Wearables
1. Holter monitors
2. HR monitors
3. Sports devices
4. HexoSkin Smart Shirt – Bluetooth to phones - $399-$499
5. Heddoko – complete smart suit for motion capture – could be used to study posture of surgeons
6. Vital Jacket – a smart shirt – a Portugese product – SIDS death prevention
7. Zio-XT is a wearable ECG monitor – can we worn in shower but not in swimming – reimbursed by Medicare
8. Polar H7 bluetooth heart rate sensor and fitness tracker – 200 hour battery life – uses a chest strap – easy to wear and inconspicuous - $55 on Amazon
9. Elite HRV – CorSense – 4-hour battery life, comparable to 5-lead ECG – CorSense = $
10. HRV4 Training App – uses your phone's camera - $9.99 on iTunes.

11. VivoSense Software is very useful for analysis

Anesthesia Interest Group (Continuing Education Units Available) (43517)
Speakers: Scott Watkins, MD1
1Johns Hopkins All Children's Hospital, Saint Petersburg, FL, US

The session is for anyone interested in anaesthesia focused simulation-based education, research, networking and/or collaboration.

The mission of the SSH Anaesthesia section is to foster global communication and collaboration among all professionals in perioperative simulation.

As a Section, our areas of focus include:
1. research
2. education
3. patient safety

Explore Resilience using Simulation: An Innovative Approach to Patient Safety (39582)
Komal Bajaj, MD,MEd, CHSE1; Mary Patterson, MD,MEd, FAAP, CPhys2; Christiane Schubert, BS,MS,PhD3; Ellen Deutsch, MD,MS, FAAP,FACS,FellowofSSH4
1NYC Health Hospitals/Jacobi, Bronx, NY, US; 2University of Florida, Gainesville, FL, US; 3Loma Linda University, Loma Linda, CA, US; 4Pennsylvania Patient Safety Authority, Plymouth Meeting, PA, US

Resilience engineering (RE) is a safety science that is underexplored in healthcare. An expert panel will present key RE concepts and describe how simulation may be used to examine, understand and develop organizational resilience. This session will expand on last year's panel, and explore how simulation can be used to tackle "impossible" goals. Discussion will include innovative concepts from the Resilient Health Care Network.

Audience response system www.rwpoll.com and enter session ID Deutsch

Healthcare systems are complex systems
1. networks of many agents, each of whom constantly act and react to each other
2. in constant evolution with fluid dynamic changes
3. complex systems, even if individual components are not
Healthcare systems are complex adaptive systems
Constantly adjust how they work
Resource constraints
Changing environmental conditions
Incompletely understood systems

See Patient Safety Authority (PSA) USA

Capacities of resilient systems
1. learn
2. respond
3. monitor
4. anticipate

You cannot make a system resilient.
Safety I – accidents and incidents = what went wrong – apply limits and constraints
Safety II – everyday actions and outcomes, risks as well as opportunities = what goes right (defined by success, achieved by adaptability, appreciative inquiry) – safety comes from understanding what the boundaries are, enhancing repertoire of responses
Types of WORK:
- Work as done:
- Work as imagined: conceptual analysis, how work should be done
- Work as claimed:
- Work as documented:
- Work as abstracted: (big data) may not be accurate
- Work as observed: but beware of the Hawthorn Effect
- Work as simulated: helps understand, not perfect

PENNSYLVANIA PATIENT SAFETY AUTHORITY HARM SCORE TAXONOMY (MEDICARE Act of 2002)

CODE   DEFINITION

Unsafe Conditions

A   Circumstances that could cause adverse events (e.g., look-alike medications, confusing equipment).

Event, No Harm

B1   An event occurred but it did not reach the individual ("near miss" or "close call") because of chance alone.
B2   An event occurred but it did not reach the individual ("near miss" or "close call") because of active recovery efforts by caregivers.
C   An event occurred that reached the individual but did not cause harm and did not require increased monitoring (an error of omission, such as a missed medication dose, does reach the individual).
D   An event occurred that required monitoring to confirm that it resulted in no harm and/or required intervention to prevent harm.

Event, Harm

E   An event occurred that contributed to or resulted in temporary harm and required treatment or intervention.
F   An event occurred that contributed to or resulted in temporary harm and required initial or prolonged hospitalization.

G   An event occurred that contributed to or resulted in permanent harm.
H   An event occurred that resulted in a near-death event (e.g., required intensive care unit care or other intervention necessary to sustain life).

Event, Death

I   An event occurred that contributed to or resulted in death

Resilience and simulation

See Paige and Gaba article (Simul in Healthcare)

Uses of simulation to improve healthcare safety
1. Infrastructure development
2. Preparing for disaster
3. Evaluation of system response

Additional sim considerations
1. types of cases (e.g. Ebola)
2. Learning objectives
3. Design team
4. Measures

Example scenario: kid with obstructed trachea in the cafeteria
See Dekker: Field Guide to Understanding Human Error, 2006.
See: Dieckman P, Paterson, M. Advances in Simulation 2017. Using Safety 2 in debriefing. We asked not "What went well?" but "Why did it go well?"
Have you seen examples of graceful degradation, graceful extensibility?
Workarounds – What are your workarounds?

Consider variations (or, adaptations) as a necessary part of an adaptive system.
Requires participants to not only see the negative side but why there was a need for it.

Simulation:
1. Facilitates knowledge of the expertise of individuals and resources available to the team
2. Can surface the risks and adaptive capacity of a system

Can we measure resilience? How do we assess resilience? Are there tools available?
We can measure safety culture, turnover; that may be proxies for resilience.

Tools
1. FRAM = The Functional Resonance Analysis Method or FRAM (Hollnagel, 2004 & 2012) provides a way to describe outcomes using the idea of resonance arising from the variability of everyday performance. ... Define the functional resonance based on dependencies / couplings among functions and the potential for functional variability. (see website)

2. Resilience Analysis Grid

International Reception with Affiliation Signing

Catered reception for international visitors and signing of new affiliates to IMSH.

WEDNESDAY 30 January

Assess Situation Awareness in Interprofessional Teams (39804)
Steven Yule, MA,MS,PhD, CPsychol1; Jamie Robertson, BA,MPH,PhD, CHSE2; Paul OConnor, PhD, CPsychol3; Roger Daglius Dias, MBA,MD,PhD1
1STRATUS Center for Medical Simulation, Boston, MA, US; 2Brigham and Women's Hospital, Boston, MA, US; 3National University of Ireland, Galway, Galway, IE

The aim of this workshop is to provide experience in video-based assessment of Situation Awareness and other non-technical skills (Decision Making, Communication, Teamwork, Leadership). These concepts are essential for safe clinical care, but difficult to assess. This workshop will provide first-hand experience of using a skills taxonomy and assessment form which can be integrated into education or clinical practice.

NOTECHS system – nontechnical skills for pilots
Elements:
1. Cooperation
   - Team building & maintaining
   - Considering others
   - Supporting others
   - Conflict solving
2. Leadership and management
   - Use of authority and assertiveness
   - Providing and maintaining standards
   - Planning and co-ordination
   - Workload management
3. Situational awareness
   - Awareness of aircraft systems
   - Awareness of external environment
   - Awareness of Time
4. Decision Making
   - Problem recognition and diagnosis
   - Option generation
   - Risk assessment and option selection
   - Outcome review

NOTSS - nontechnical skills for surgeons

3 Level Model of Situation Awareness
1. Perception of data and the elements of the environment
2. Comprehension of the meaning and significance of the situation
3. Projection of future states and events

1,2, and 3 lead to decision-making, and then to action

Behavioural indicators of SA
1. Gathering information
   a. Scanning the environment
   b. Asks questions of others
2. Recognition and understanding
   a. Verbalises current concept models
   b. ?

Limitations of observation and behavioural clues
1. Cognition can only be inferred
2. Many assumptions at play
3. Requires sit awareness of the observer

Now refer to handout
Video 1. Laparoscopic myotomy. Focus on the surgeon's situational awareness (effective behaviours, ineffective behaviours)

Frameworks for enhancing SA.
1. TeamSTEPPS
2. Cross monitoring – a harm error reduction strategy that involves:
   a. Monitoring actions of other team members
   b. Monitoring the patient
   c. Knowing the status of the patient

Knowing progress toward the goal

3. The PEARLS Healthcare Debriefing Tool (see elements) – especially describing what happened and your understanding of what happened – also the Analysis phase to explore the performance domain; including SA.

Video 2. Preparing for an EVA (space-walk). Crew of 4 on lunar mission. One astronaut is not feeling well. Focus on the astronaut's situational awareness (effective behaviours, ineffective behaviours)

Does Simulation Ever Fail? (38806)

Speakers: Heidi Felix, DHSc,MPAS, PA-C1; Leslie Simon, DO2; Ryan Chadha, MD3; Kristin Rosenbush, BSN,MSN, CCRN, RN2
1Mayo Clinic, Jacksonville, FL, US; 2Mayo Clinic Florida, Ponte Vedra, FL, US; 3Mayo Clinic Jacksonville, Jacksonville, FL, US

This session will present arguments, both for and against, the perceived common obstacles and shortcomings that may occur in simulation. Learners will leave the session with a critical overview of simulation obstacles allowing for a more thorough needs assessment at their home institutions.

Scenario: liver transplant scenario. Trainees were given a form to complete.
4 key phases of a liver transplant, with complications at each phase; 4 trainees, each had 1 phase to do.
However, there were no improvements in confidence scores, with 6 residents did worse.

Topics to cover
1. Should we place more emphasis on low volume / high risk of high volume / low risk?
2. Does timing of debriefing matter
3. What role does cognitive overload play in success of simulation?
4. Should bad outcomes be relieved?
5. What role does clinical experience play in success of simulation?
6. Does the fidelity of simulation affect the outcome?
7. Should there be a hidden agenda?

Emotion before cognition – allow de-griefing before learning.

Remember that confidence DOES NOT EQUAL competence. There is very low correlation.

Don't forget psychological safety. Especially mixing groups of different experience and skills. The debriefing needs to deal with this. During pre-briefing it is good to establish the zone of safety at the start of the simulation.

Handover of Presidency from Dr Joe Lopreiato to KT Waxman, RN.

Closing Plenary Session and Keynote Address: Simulation-based Attractions and Guest Experience Development, presented by Michael Tschanz (42761)

A description of model-based design and engineering processes and methodologies will be presented and how these are being used and applied in the development of rides, shows, robotic systems and other guest experiences at Walt Disney Parks and Resorts worldwide.

Disneyworld (Florida) = 47 sq. miles = size of Boston.

Toy Story Land and Star Wars Land are under construction.

Animated modelling used to model every car, bus, human is modelled in the simulation to determine flow of traffic and people.

There are 6 parks: Anaheim, Orlando, Tokyo, Shanghai, Paris, Hong Kong.

4 phases: Safety, Show,
Ride simulation – used PASCAL.

"We keep moving forward, opening new doors, and doing new things, because we are curious and curiosity keeps leading us down new paths."

FEEDBACK

This seemed to be a well-organised meeting although I spoke with several presenters who stated that their workshops had been moved around more than once.

San Antonio was an excellent city for a conference – central convention centre very close to several large hotels. The numerous restaurants, and a shopping mall, were spaced along the Riverwalk promenade was 200 m away from the conference venue.

The town was safe and friendly.

San Antonio River Walk with many restaurants on both sides of the narrow river.

Next IMSH Meeting

San Antonio January 2020 San Diego, California. Kirsty Freeman RN (Perth) is a convenor!

Richard Riley

January 2019

Email: richard.riley@uwa.edu.au

Disclaimer: These notes are given without prejudice in good faith and reflect only the perspective of the author.

More vendors with fat suits were on show.