

September 15th, 2022

3:00 PM ET

AIM TAP WEBINAR:

Bringing Back OB Simulation  
in the Midst of COVID-19

with Drs. Amy Judy and Kay Daniels





## ALLIANCE FOR INNOVATION ON MATERNAL HEALTH

The Alliance for Innovation on Maternal Health is a national, cross-sector commitment designed to support best practices that **make birth safer, improve maternal health outcomes, and save lives.**

You can find more information at  
[saferbirth.org](https://saferbirth.org).

This program is supported by a cooperative agreement with the Health Resources and Services Administration (HRSA) of the U.S. Department of Health and Human Services (HHS) under grant number UC4MC28042, Alliance for Innovation on Maternal Health. This information or content and conclusions are those of the author and should not be construed as the official position or policy of, nor should any endorsements be inferred by HRSA, HHS or the U.S. Government.



# Before we get started

AIM TAP  
Webinars  
are recorded

Resources discussed  
are not vetted or  
endorsed by AIM or  
ACOG and are  
provided for your  
convenience

Resources  
should be  
used at your  
discretion

If you need  
help during the  
call, please chat  
an AIM staff  
member



# Bringing Back OB Simulation in the Midst of COVID-19



Dr. Kay Daniels  
MD



Dr. Amy Judy  
MD, MPH

**OBsim:**

**From in person to virtual : our journey  
through the pandemic and beyond**

**Kay Daniels MD**

**Clinical Professor Obstetrics and Gynecology**

**Amy Judy MD**

**Clinical Assistant Professor Obstetrics and Gynecology**



The presenters have nothing to  
disclose



# Learning objectives

1. Demonstrate various options to adjust training to accommodate pandemic restrictions
2. Understand how to apply principles of simulation training to a virtual model
3. Describe program development for virtual simulation training



## Our past

- Began OBSim in 2004
- L&D Nursing and OB residents required to participate once a year
- Anesthesia residents participate when on OB rotation
- Attendings invited and receive MOC4 credit for participation
- 1 scenario annually - alternate between common (PPH/HTN) and rarely seen (AFE, LAST) topics

# Beginning of COVID pandemic: Level 1 Restrictions

- In person activities limited to “critical training”
- Mandated social distancing and reduced room capacities
- Mandated PPE for all activities
- Unit staffing issues due to staff illness/exposure
- Provider anxiety about in-person gathering



Julie Mann "She can only see my eyes" Nurses and Midwives lead.org

# What we tried and what didn't work

- Same scenario with half of the participants watching via Zoom
  - Less engagement
  - Poor audio quality (HVAC)



Level 2 Restrictions:

Move to Virtual-Only Simulation:

- Hospital restrictions eliminated nearly all in-person gatherings
- Hybrid option had not worked great anyway

**We weren't sure it would work, but we had no alternative.**

**Obsim is vital education for our staff and for identifying systems issues on our unit.**





## Running a Virtual Simulation Program

---

Participants were able to suspend disbelief and engage

---

No manual tasks to do → more in depth conversations

---

Chat function helped junior team members and introverts participate

---

System issues could still be explored

# HOW TO: Run a Virtual Sim

- **Keep the scenario simple**
- Use a scenario you have already done in person
  - Established learning objectives and content, kinks worked out
  - But need to modify and simplify
- Pick a scenario that will work well virtually:
  - Few important manual tasks (shoulder dystocia is a bad choice)
  - High emphasis on good communication: preeclampsia, hemorrhage, sepsis
- Make the experience visually engaging
  - Video clips, photos and even audio clips i.e. of someone seizing or rapid blood loss
- Be sure to include breaks

# HOW TO: Who do you need on your Sim team?

## **Sim Director:**

Runs the scenario and possibly the debrief

## **Zoom Monitor:**

Aids learners to rename their zoom name, records, monitors chat box questions

## **Slide Master:**

Advances slides, activates AV content, adds text/images as scenario unfolds


Ideally one content expert from each participant discipline is present (Nursing, OB and Anesthesia MDs)

# How To: Who are your learners?

- **Experienced** with in-person simulation
- **Novices**
  - New to simulation
  - Very little experience
  - Task training only



# Let's take you through 2 types of our virtual sims ...

- Everyone gets Zoom simulation tips
  - Everyone gets introduction or reminder about general simulation principles
- 

# Zoom Tele-simulation Tips

- Please do NOT drive when attending Obsim  
(Yes we had to say this!!)
- Use headphones to avoid background noise
- Mute your microphone when not speaking
- Keep your video on for the whole session
- Lay out the timeline (sim, break, debrief)

W E L C O M E

*What Happens in the*

**SIMULATION ROOM**

*Stays in the  
Simulation Room!*

# Safe Learning Space

- Simulation is **confidential**
- OBSIM is to improve teamwork and systems
- Zoom OBSIM is new for all of us
- We are here to learn from each other

# For the experienced simulation learners

- Simulation principles reiterated
- Define virtual rules and tips
- Virtual Sim Director must be more active
  - Keep the scenario moving
  - Ask for participants to step in

# Let's begin: Introductions

- Staff & participants introductions
- Role assignments:
  1. OB(s)
  2. Anesthesiologist(s)
  3. Nurse(s)
- Voice of the patient
- Virtual Sim Tips:
  - Rename in Zoom as roles are assigned (primary nurse, OB, etc.)
  - Explain that Director will call on people in sequence to facilitate participation
    - Director writes down names/roles to help with this process

# Our Patient: Noelle

21yo G1P0 at 36 weeks sent from clinic ,  
BP 161/100 mm Hg, nausea, not feeling well

- PMHx: Noncontributory
- FamHx: Hypertension in mother
- General Exam: otherwise WNL
- Cervical Exam: 2 cm / 50% in clinic

# Sim begins : Meet Noelle and Jim

- Noelle just arrived on L&D and is roomed in 11B



# Vital Signs

- BP 170/110 mm Hg
- HR 90 bpm
- O<sub>2</sub> Sat 98% RA



# Care continues: Enter the OB



# Patient again complains:

- "I really have a headache"
- Critical Lab phone call

**Hct 38%**

**Plt 48K**



# Care continues post-ictal








# More results

- AST 78
- ALT 80
- Coag WNL
- **Creatinine 1.4**





# For the novice simulation learner

- Requires orientation to simulation
  - Requires more direction during the sim
  - Simulation principles and video/rules tips same as experienced group
- 

# Getting started

In the labor room



# Prompting and responding during the sim

GO MOMS\_PPH\_12.2.21 - PowerPoint

File Home Insert Design Transitions Animations Slide Show Review View Help Tell me what you want to do

From Beginning From Current Slide Present Online Custom Slide Show Set Up Slide Show Hide Slide Rehearse Timings Record Slide Show Set Up

Monitor: Automatic

Play Narrations Use Timings Show Media Controls Use Presenter View

Monitors

Thumbnails

QBL = 2100 mL

HR 128 bpm  
BP 88/50 mm Hg  
SaO<sub>2</sub> 97%

Click to add notes

Slide 21 of 84

Notes Comments

110%

GO MOMS Team (Kaw...)

# Lessons learned from experienced simulation team

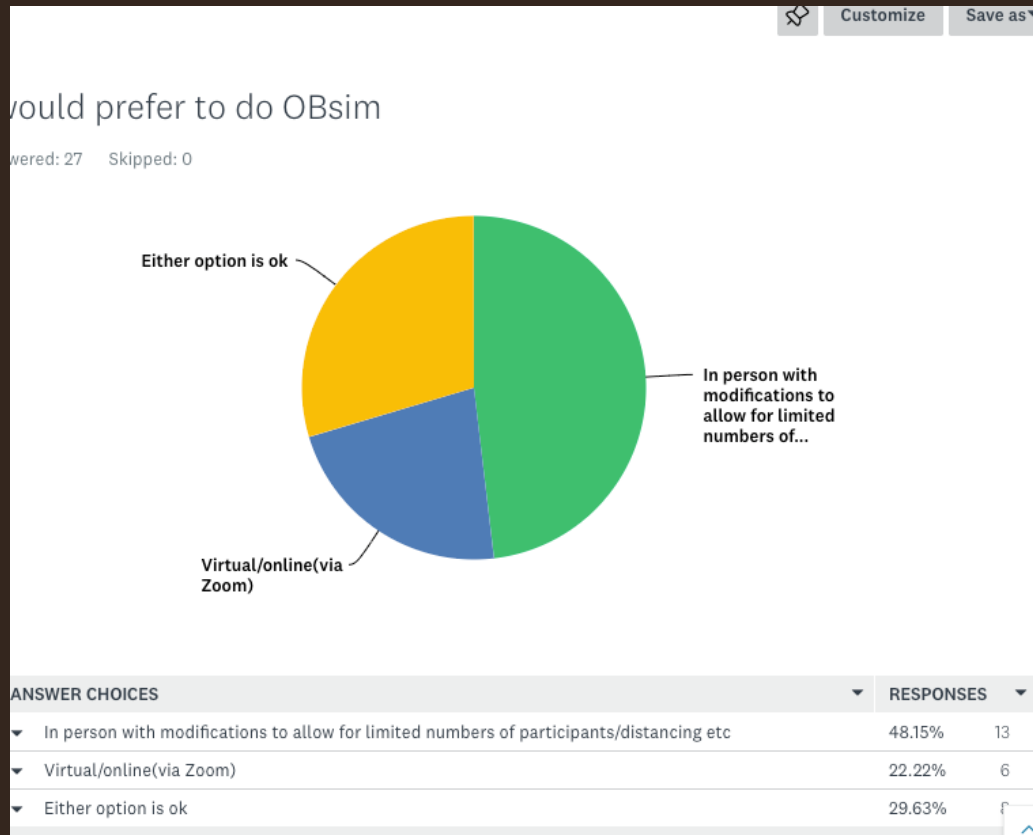
Please tell us what you learned today that you will take to your work if you need it **TOMORROW**



# The Debrief: In Person vs Virtual

	In Person	Virtual
Communication	Less structured: Allows review of real communication styles	More structured: Allows for quieter participants to be called on to more actively participate in the simulation
Participation	More vocal are mostly heard	Round-robin prompts and chat box for comments expanded participation
System errors	Reveals errors at the time of the simulation and recall from real life	Allows recall of errors experienced in real life
Convenience	Must gather in person	Can perform from anywhere there is internet
Disruption of the unit	Yes	No
New information	Allows didactic and hands on	Didactic only
Multidisciplinary Discussion	Yes	Yes

# What did our learners have to say?



- Moderately useful (1)
- Very useful (4)
- Extremely useful (3)

I was nervous about how this was going to be accomplished virtually and I felt like it was very useful. I appreciate you calling on people to make sure everyone participates, and it eliminates people trying to talk over one another. - RN

I always want more! But honestly y'all have done an amazing job adapting to our COVID constraints. - OB

I thought this was great!  
Nailed it. - RN

It actually exceeded my expectations. I enjoyed the virtual sim. - RN

Virtual simulation was much better than I anticipated, and I thought everyone did a great job communicating. - RN

What did our  
research have  
to say?

Does virtual simulation training improve providers' knowledge and confidence to manage obstetric emergencies?

Virtual obstetric simulation is feasible and improves knowledge and confidence, which can be retained over time. This educational modality is sustainable, scalable and an accessible format to enhance education and training.

# Summary



Virtual simulation training is well accepted by medical providers



Choose scenarios that require minimal kinetic training



Actively call on participants to respond



System errors can and should be included



Encourage the chat feature to engage quiet participants

# Thank you for your attention



<https://www.cttsonline.com/>



# How did you find us?





# Upcoming TAP Webinars

Register at [saferbirth.org](https://saferbirth.org) under Resources > Events

## Cardiac Conditions in Obstetrical Care:

Considerations for Cardiomyopathy in  
Pregnancy



October 6<sup>th</sup>  
at 3 PM ET



Dr. Karen Florio, DO

## Improving Post-birth Education about Potential Complications

October 20<sup>th</sup>  
at 3 PM ET



LaShea Haynes

M.Ed., MSN, AGCNS-BC, APRN, RNC-OB/EFM



# Thank you!

The recording will be emailed to all attendees once ready

AIM will also post the recording on our website, [saferbirth.org](http://saferbirth.org)

Any questions about this webinar or the series can be sent to [AIM@acog.org](mailto:AIM@acog.org)

Remember to register for upcoming webinars!