Beyond compliance

Grappling with paradoxes & silences in OR team communication

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Communication is

a key variable in teamwork & quality processes

a common cause of errors & adverse events

an increasing site of interventions to improve safety

Communication and Safety

Initiatives to improve team communication
and team work
have been popular in the past decade

Team communication interventions

Team training improves attitudes

- Bleakley, Boyden, Hobbs, et al. 2006
- Grogan, Stiles, France, Speroff, Morris et al. 2004
- Morey, Simon, Jay, Wears, Salisbury, Dukes et al., 2002
- Salas, Wilson, Burke & Wightman, 2006
- Bleakley, Boyden, Hobbs, et al. 2006;
- Grogan, Stiles, France et al. 2004
- Morey, Simon, Jay, Wears et al., 2002
- Salas, Wilson, Burke & Wightman, 2006
- Halverson, Moorman et al. 2009

Intervention outcomes

Preoperative briefing interventions in particular have been associated with:

- Improved communication (Lingard, Regehr, Reznick et al. 2008; in press)
- Direct changes to patient care plans (Awad, Fagan, Bellows, et al., 2005; Lingard, Whyte, Espin, et al., 2006)
- Perception of safe collaborative practice (Makary, Mukherjee, Sexton, et al. 2007; Lingard, Regehr, et al. 2008)

Briefing intervention outcomes

unexpected,
negative findings

can be as valuable as

celebrating success

But we don’t often attend to them

‘Paradoxical effects’,
CogTechWork, 2008

‘Uptake of a Team Briefing’,
SocSciMed, 2010

‘Counting Silence’,
Safer Surgery (R. Flin), 2009

‘Why didn’t they say anything?’,
JAdvNurs, 2009

A couple years of attending

introduce our OR team briefing research

explore paradoxical effects

discuss the challenge of ‘silence’

Presentation Objectives

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Our OR team briefing study

rhetorical view of language as social action

mixed methods: qualitative and quantitative

interdisciplinary research team

Our approach

significant reduction in communication failures

strong relationship between changed communication routine and changed work practices

improved timing of antibiotic prophylaxis

Successful results

Towards safer interprofessional communication: Constructing a model of 'utility' from team briefings
J InterpCare, 2006

Evaluation of a team briefing among surgeons, nurses,and anesthesiologists to reduce failures in communication
ArchSurg, 2008

Evaluation of a preoperative team briefing: Improved communication routine results in improved clinical practice.
QSHC, 2011.

In ~10% of cases, the entire briefing was ineffective

However…

some problematic instances took place in

otherwise positive briefings

Whyte, Lingard, et al. *Cognition, Technology & Work*, 2008.

Reflections on 3 paradoxical effects

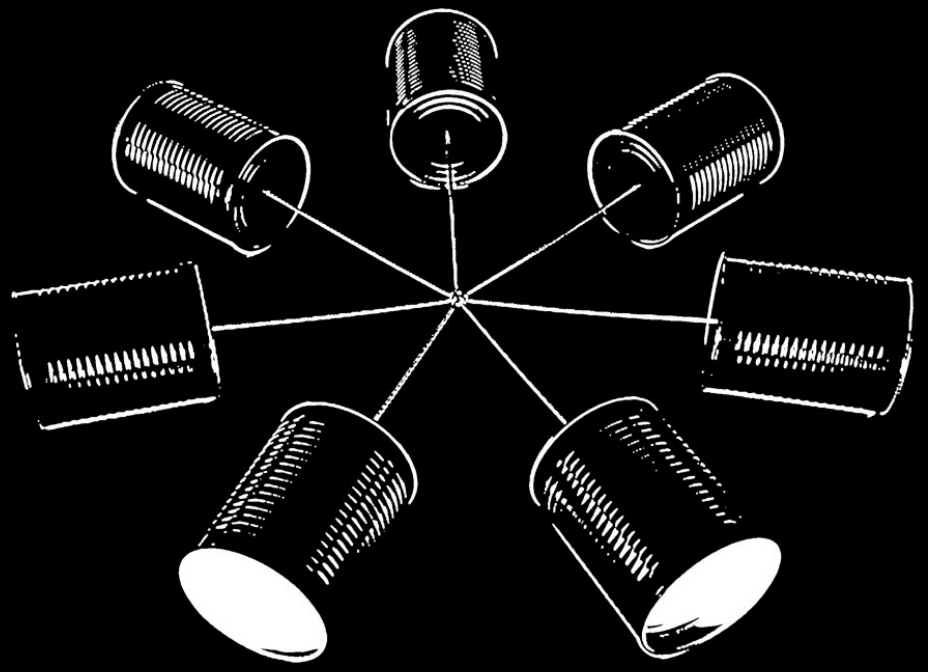
and their implications for studying team communication interventions

team briefings
can reveal gaps

Paradoxical Effect

The surgical fellow had familiarized himself with the patient records without realizing there was an error in the OR booking. The briefing was well underway when the staff surgeon arrived, heard the discussion, and intervened to say the procedure they were doing was not the one being talked about. The surgical fellow told the group to "ignore everything I said" and relayed corrected information about patient positioning and equipment.

(Briefing 208)



something

is not always better than

nothing

Briefing performance inconsistent

counting briefings as

done or not done

is insufficient

To improve practice, we need insight into *what happens* in the briefings

team briefings can
diminish
professional
divisions

Paradoxical Effect

This briefing covered significant details about the patient's history and the operative plan…. However, SS gave something of a monologue and didn't invite contributions from others. CN and AS each interjected at points in the briefing, but SN (a novice nurse) stood at the scrub table and kept her back to the group as she listened.

After the briefing, she told [observer] that SS "hadn't really included" her, so she didn't want to "eavesdrop".

(Briefing 94)

the nurses' role in particular could be minimized

Briefing participation patterns may both reflect and reproduce power dynamics

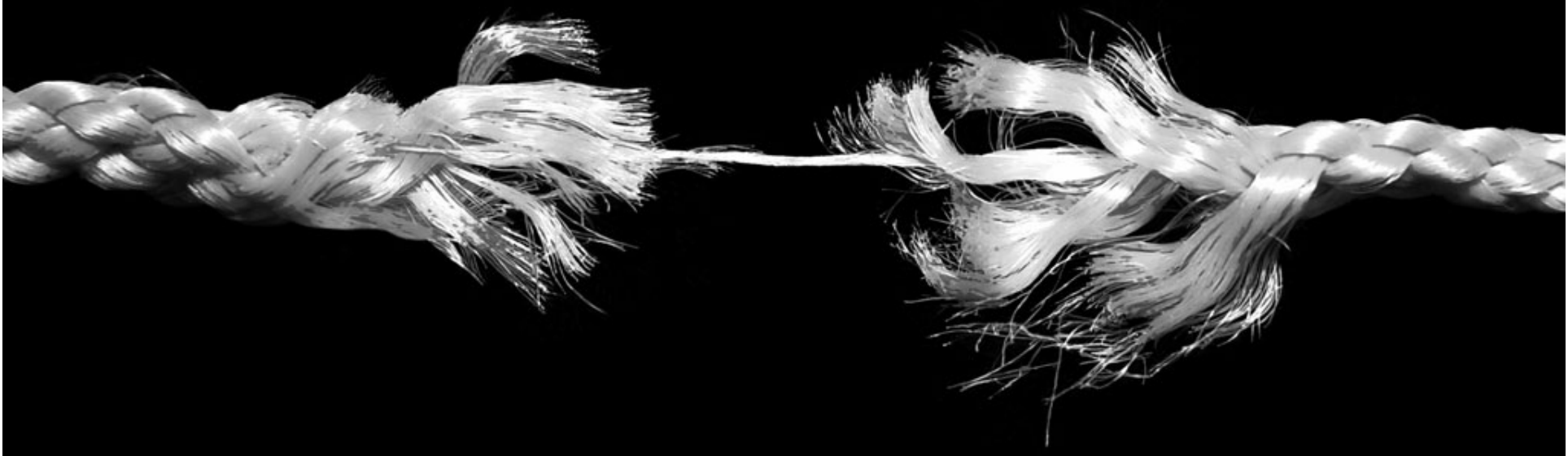
Such impacts
may affect
‘uptake’ & compliance
over time

team briefings can

foster positive

communication

team briefings can
disrupt positive
communication



Paradoxical Effect

When the staff surgeon entered the room (at which point preparations were well underway), he went directly to the nurses to let them know about a few things that would be needed, and he asked them if they had “his clamp”, which had been specially requested for this case. He then looked for the checklist, convened the team, and began to lead a briefing, presenting the patient’s diagnosis and medical history…

(Briefing 238)

After three prompts, he handed the checklist to the junior and asked her to take over, while he walked away to the computer. The resident led quietly and uncertainly. The nurse stopped tucking in the pt's arms so that she could hear. When the briefing was wrapping up, the staff surgeon rejoined the group, looked at [observer], and said "Ok? Was that ok?" He then went to talk with the anesthesiologist about arm positioning, where the patient was going postoperatively, and the anticipated duration of the case.

(Briefing 238)

‘artificial’ communication
can undermine ‘authentic’ talk

poor briefings can
replace existing positive
communication practices

is it fair to count the briefing as a ‘positive’ communication event in such instances?

Measuring success and failure
of communication
requires complex tools

When we move to widespread implementation,

To what degree must we trade data richness for data scope?

Implications

One hospital in Ontario shared with us their story:

"We are rolling out the Surgical Safety Checklist... We spent 1 month in Ortho, 1 month in Gyne, 2 weeks in ENT, and are now in Gen Surg. We have had our challenges, despite having a Champion Working Group and customizing to our organization. Some members of our anaesthesia department don't feel they should have to be present for the Briefing. We've made it mandatory for a minimum of anaesthesia and nursing to be present for the briefing, when the patient comes into the O.R. before an anaesthetic has been administered.

The challenge of silence

Complexities in the evaluation of team communication


team communication exists
in a spectrum of
speech and silence

The circulating nurse, who is new to the room, relieving someone on break, says to the scrub nurse: “How many sets of sponges did you have?” (The circulating nurse speaks loudly; the scrub nurse is soft spoken.) The staff surgeon picks up on this exchange and asks: "What are you missing?” Neither nurse responds to his question. The circulating nurse leaves the theatre and checks something with the earlier circulating nurse, then returns to the room. The staff surgeon says, "you're not answering the question. Are you missing something?” The circulating nurse says there is no issue.

(Fieldnote 672)

The staff surgeon noted loudly, without looking at anyone in particular: "So we'll maybe give this guy a couple of doses of postoperative antibiotics". There is no immediate response from anyone present, although the staff anaesthetist looks up, seems to register what the staff surgeon has said, pauses in her work, but does not respond. A couple minutes later, the junior surgical resident asks, "What did you say about postoperative antibiotics?" There is no response from the staff surgeon. The question remains unresolved.

(Fieldnote 1103)

Silence is not the absence of communication

Silences *communicate*:

agreement, passivity, resistance,
distractedness, disregard, biding time…

Silence can influence safety
in both positive and negative ways

Silence abounds in the operating room-
may even be sought after

"Let's see if we can get through without saying a thing, ok?"

Structured observational tools tend to direct our attention to communicative 'presence'

And deflect our attention from 'absence' (communicative silences)

Counting silence

Silence is often only recognizable when signalled by communication

Silence requires observers to attribute meanings based on other cues

When is silence a communication failure?

When is it not?

The circulating nurse and scrub nurse are doing their count near the end of the case. Surgical resident requests "4-0 Vicryl please" from the scrub nurse. The scrub nurse's back is to him; she doesn't immediately respond. Resident requests again with a slightly louder voice: "Can I get a 4-0 Vicryl please?" Nurse still doesn't respond. The surgical resident raises his eyebrow at the junior resident across the table. A few moments later, the count is done. The nurse repeats "4-0 Vicryl", handing the suture. The resident takes it, appears irritated, sighing loudly and shaking his head.

Productive silence?
Problematic silence?

Interpretations

Perhaps the request has not been heard because the nurse is focused on the counting protocol

Intepretations

Perhaps the nurse did hear the request

Non-response is meaningful: it reflects nurse's prioritizing of the counting & subordinating of the suture request in her task management

Interpretations

Perhaps the nurse's silence carries an additional purpose of indirectly delaying the incision closure until count is complete

She may avoid explicit articulation of this purpose: silence as a conflict-avoidance mechanism

Silence is not the absence of meaning:
it can be purposeful & meaningful, functional or dysfunctional (Glenn 2004)

Silences may reflect linguistic conventions like turn–taking, or be “communicative acts”
(Saville-Troike 2003)

Silence may reveal power relations
& communicative constraints
(Manias & Street ‘01; Riley & Manias ‘05; Gillespie et al ‘07; Bradbury-Jones et al ‘07)

Silence is meaningful

Evaluation of team communication

can’t just treat it as

Nothing

Absence

or ‘Off’

Interpreting silence is a practice issue as well as an evaluation issue

Staff surgeon says loudly without taking his eyes from the surgical field: "Almost certainly we're going to need a flexible sigmoidoscope and Dr. Black [urologist]." The circulating nurse responds, using surgeon's first name, "When, Larry?" There is no response from the surgeon, who continues working. The nurse goes to call central processing to get the equipment sent up, after which she pages the urologist.

Situation too emergent for surgeon to respond?

Surgeon doesn't have 'when' answer yet and will respond when s/he does?

Question not worthy of response?

'I asked for it now, so I need it now'

Nurse infers meaning from the silence **and acts**

Silence (and responses to it on the team)
can be both functional
and dysfunctional

Silence can promote safety on a team or undermine it

More study is needed if we want to make sound judgements about team communication

Changing communication practices in the workplace is tricky business

In summary

Paradoxical effects of interventions

provide important insight into subtle factors influencing Implementation and uptake

Sophisticated evaluation must contend with

the spectrum of speech and silence

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