

*A rhetorical approach
to team communication:
Methods, insights, challenges*

Lorelei Lingard, PhD

November 2008

Presentation Objectives

- Introduce a rhetorical approach to medical discourse
- Reflect on how this approach shapes the research method in our OR team program
- Share insights afforded by this approach
- Highlight challenges we've encountered
- Provoke discussion along the way

My context

- PhD in Rhetoric from a Dept of English
- 12 years studying healthcare team discourse in inter-professional settings (OR, ICU, medicine and paediatric wards)
- Seek to understand the role that language patterns play in inter-professional work, novice socialization and patient safety

My context

- “Inside” but never an “Insider”
- Implications for my approach
 - Interdisciplinary team research
 - Critical analysis



Part A

What is the rhetorical approach?

A rhetorical perspective

- Language not only describes, it also constructs reality
- Language performs social actions, enacts attitudes, enables social identification and division
- Rhetoric is interested in *what language does* – language as social action

(Aristotle; Burke '68; Coe '93; Miller '96; Lingard '99)

Situating rhetoric

- Rhetoric offers a socio-cultural approach to discourse and education
- Focus on recurrent language patterns ('genres') to understand the situated values they reflect and reproduce
- Emphasis on language as social currency, a way of advertising membership, of defining group boundaries

(Schryer '04; Lingard '03; Medway '01; Bazerman '96)

Compared to the tradition...

- Individualist orientation
 - ‘communication skills’ that individuals acquire and employ in situations
- Mechanistic model – message, messenger, receiver
- Directs attention to problems at individual level
- Deflects attention from social construction of meaning

Part B

What methods do we use?

Our approach

- Main tools: field observations, interviews, focus groups
- Etic/emic integration is critical – ongoing negotiation between what the outsider notices & what the insider understands
- >800 hrs observation in OR and >250 interviews and focus groups with team members

Sample observational method

- Observation by trained researchers
- 1 month in each of 4 surgical divisions
 - (ENT, Urology, Cardiac & General surgery)
- Variety of personnel and procedures
- Standard field note technique for recording
- Casual 'interviews': "is this *the usual?*"

Observations: Key issues

- Observer effect (“Hawthorne effect”)
 - When an observer is in the OR, is what s/he sees an authentic representation of what goes on when s/he is NOT there?
- Mechanisms to deal with observer effect:
 - informant checking
 - duration of observation sessions
 - non-participant observation

*“You should come everyday --
he’s never been so nice
to me.”*

(Circulating Nurse)

Sample focus group method

- 9 focus groups
- Both uni- and multi-disciplinary
- Discussion prompts: 'cases' developed from observation data
- Audio-recording and note-taking on group dynamics

Focus groups: key issues

- Power dynamics!
 - Facilitation and group arrangement
- Getting past 'blank faces' and 'PC' answers
 - Scenarios, internal/ongoing member checking
- Confidentiality

Part C

What have we learned?

Our journey

- We've moved from description, to theory-building, to intervention, to outcomes measurement, and back to theory building
- Studied ORs in multiple hospitals, including academic and community
- Our research team membership has shifted, but the principle of interdisciplinarity remains

Our journey so far

- OR talk patterns & sources of tension (2001, 2002)
- Role of team talk in novices' developing identity (2002b)
- Classification of communication failures (2004)
- Piloting a team briefing intervention (2005)
- Reliability of an observational communication failures scale (2006)
- Relationship between briefing and work (2006)

Our journey so far

- Briefing's impact on communication failure (2008)
- Critical ethnography of of silence (In submission)
- The problem of silence in evaluating communication (In press)
- Challenges of changing routine in team settings (In submission)
- Briefing's impact on antibiotic prophylaxis (In submission)

A story from our journey: Studying communication failures

Lingard L, Espin S, Whyte S, Regehr G, Baker GR,
Reznick R, Bohnen J, Doran D, Grober E.

“Communication failure in the operating room: an
observational classification of recurrent types and
effects.”

Quality and Safety in Health Care 2004; 13: 330-334.

Background

- Communication is a core concept in patient safety discourse
- It is also an increasingly identified 'culprit' in errors and adverse events

“Communication” problems cited
in 60% of sentinel events
reported to JCAHO.

(JCAHO. Sentinel event statistics: May 7 2003.
<http://www.jcaho.org>)

Survey findings suggest that
surgical culture discourages
questioning and cross-
checking across hierarchies

(Sexton et al, *BMJ* 2000)

Communication breakdowns
among personnel were a
factor in 43% of
surgeon-reported
adverse events

(Gawande et al, *Surgery* 2003)

A rallying cry

- Calls from professional organizations, government bodies, accrediting bodies

Improve communication!

- Ripple effect into health professions education
- BUT...not much empirical data on what, exactly, is the nature of the communication problems on OR teams (or elsewhere)

Research Questions

What goes wrong in communication on inter-professional teams?

Can recurrent failures be categorized for the purposes of creating educational interventions and assessment tools to measure impact?

Methods

- 90 hours field observations
- 48 procedures in general & vascular surgery
- 105 team members observed
- 3 analysts identified communication failures & visible outcomes
- Insiders reviewed for trustworthiness

Results

- Fieldnotes contained 421 communication events
- 129 (30%) were categorized as 'failures' using a rhetorical framework for communication
- 4 dominant types of communication failure:
 - Suboptimal timing
 - Inaccurate content
 - Lack of resolution
 - Gaps in group composition

Rhetorical Framework

Factor	Definition of Failure Type
Content	Insufficiency or inaccuracy of information
Audience	Gaps in the composition of the group
Occasion	Problems in the spatial/temporal situation
Purpose	Goal is unclear, inappropriate, not achieved

Content Failures

Dominant Theme:
Relevant Information Missing

As the case is set up, the anesthesia fellow asks the staff surgeon if the patient is going to an ICU bed after. Surgeon replies “the bed is probably not needed, and there isn’t likely one anyway, so we’ll just go ahead.”

Audience Failures

Dominant Theme:

Absence of a Key Member During Communication

During set-up, surgeon asks a nurse to ask anesthesiologist if patient received antibiotics and heparin. Surgeon exits. Nurse relays question; anesthesiologist says 'yes, antibiotics, but I didn't see heparin anywhere.' Nurse checks chart: "There isn't even an order...so I guess none came down." Anesthesiologist: "Really?"

Occasion Failures

Dominant Theme:
Sub-optimal Timing

The staff surgeon asks the anesthesiologist whether the antibiotics have been administered, when the procedure has been underway for almost an hour.

Purpose Failures

Dominant Theme:

Failure to achieve purpose

During a living donor liver resection, the nurses discuss whether ice is needed in the basin being prepared for the liver. Neither knows. No further discussion ensues.

Implications

- A rhetorical approach characterizes communication as social act
 - Failures do not primarily reside in individuals' communication 'skills', they emerge in situations
- Provides a framework for targeted education efforts and measuring impact

Part D

What challenges do we encounter?

*The issue of 'measuring'
communication failures...*

Tensions between paradigms

- A rhetorical approach to the study of team communication involves a merging of divergent paradigms
- True for many social science/humanities approaches to health professional issues
- This dialoguing of paradigms is the site of both insights and tensions of our work

Balancing acts

- As our research in team communication moves from theory-building, to intervention, to outcomes measurement, we have gone from describing failures to measuring them pre/post intervention
- And we get increasingly enmeshed in the values and expectations of divergent (incommensurable?) paradigms

Assessment tool

- We developed a tool to measure the impact of an OR team briefing on communication failure rates pre/post
- We struggled to balance authenticity & reliability
- The tool creates a useful – and passably authentic – simplification, which we supplement with fieldnotes

Lingard, L., Regehr, G., Espin, S., & Whyte, S. A theory-based instrument to evaluate team communication in the operating room: Balancing measurement authenticity and reliability. *Quality and Safety in Health Care*, 2006, 15(6), 422-426

Communication failure record - 3050

Case number: 3050
 Event number: 1
 Event time: 7:58
 Linked to event: 3

Observer(s)

JP	<input type="checkbox"/>
SW	<input type="checkbox"/>
LK	<input type="checkbox"/>
SE	<input type="checkbox"/>
CC	<input checked="" type="checkbox"/>
LL	<input type="checkbox"/>
FG	<input type="checkbox"/>

Qualities

- Occasion
- Purpose
- Audience
- Content
- Style
- Qualities recorded on separate form

Other:

Outcomes

- No visible outcome
- Inefficiency
- Delay
- Tension
- Resource waste
- Workaround
- Procedural error
- Adverse event
- Patient inconvenience
- Other outcome

Description of event

7:58
 SS arrives.
 CN1 to SS: 'Where do you want the monitor?'
 SS: 'I want 2 monitors'.
 CN1: 'We only have 1'.
 SS: 'Well talk to (Nursing Team Leader) about it because you need to get 2'.
 CN: 'Well where do you want this one?'
 SS: 'I don't. I want 2'. SS leaves the room.

Reflective notes/rationale

PURPOSE: SS refuses to respond to CN1's question. The reason for SS' challenging behaviour is not apparent.

STYLE: It is clear that SS is being difficult and belligerent on purpose.

CN1 may be irritated by SS' behaviour, but at this point he is handling SS' inappropriateness quite well.

Timing of communication event

- Uncertain
- Before checklist briefing
- During checklist briefing
- After checklist briefing

Relevancy of event to checklist briefing intervention

- Uncertain
- Communication event has potential to be influenced by checklist briefing
- Communication event does not have potential to be influenced by checklist briefing

304

Tool used to assess >1500 procedures in 4 yrs

Measurement tensions

- Between rhetorical emphasis on social context and measurement emphasis on individual events
- Between measurement goal of inter-rater reliability and rhetorical goal of integrating (not eliding) divergent perspectives
- Between the 'objectivity' of numerical values and the 'subjectivity' of language

Strategies for dealing with tensions

- Dynamic collaborative team consisting of lateral thinkers from both paradigms
- Constant questioning of the tacit assumptions of both paradigms
- Persistent weighing of risks and benefits
- Compromises you can live with

The issue of 'silence'

'Counting' silence

- Silence abounds in the operating room
- Yet structured observational tools direct our attention to 'presences' (communications that can be directly observed)
- And deflect our attention from 'absences' (communicative silences)

Counting silence

- It can be difficult for the outsider to attribute meanings to silence
- In fact, silence is only even recognizable when some 'presence' signals that something expected is missing (e.g., questions that are not answered)
- How to 'count' silence when evaluating communication failure is complex!

Example

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

Purpose failure?

- Silence represents 'no response' to the request
- Perhaps the request has not been heard because the nurse's attention is focused on the counting protocol
- Observer taking this interpretive stance would categorize this exchange as 'purpose not achieved', given that the resident makes 3 attempts before getting a response

Content failure?

- Perhaps the nurse did hear the request
- Non-response is meaningful: it reflects nurse's prioritizing of the counting activity and subordinating the suture request in her task management
- Observer might categorize this as a 'content' problem – “relevant information missing”-- since explicit indication of this prioritizing might avoid the resident's growing irritation at non-response

Occasion (timing) failure?

- Perhaps the nurse's silence carries an additional purpose of indirectly delaying the incision closure until count is complete
- She may purposefully avoid explicit articulation of this purpose: her silence may be a conflict-avoidance mechanism
- Taking this approach, we might characterize the resident's original request as a timing failure, reflecting an inopportunistically timed request

It depends...and it matters

- Silence is not the absence of meaning: it can be purposeful and meaningful, functional or dysfunctional (Glenn 2004)
- Silences may reflect linguistic conventions, (e.g., turn taking) or be “communicative acts” (Saville-Troike 2003)
- Silence may reveal power relations and communicative constraints (Manias & Street 2001; Riley & Manias 2005; Gillespie et al 2007; Bradbury-Jones et al 2007)

Consider the same scenario
with a slight shift in context...

- The suture request comes from a staff person (not resident) to a less assertive scrub nurse
- We might see the suture request responded to immediately = no evident communication failure
- However, the responsiveness itself might be the failure, as it interrupts the counting protocol
- *Sometimes communication progresses smoothly towards a dangerous outcome*

Silence

- Silence can be both functional and dysfunctional
- We have used theories of discourse and power
 - to describe recurrent patterns of silence in the OR
 - to consider the actions and relations that these silences embody,
 - to discuss their implications for sophisticated evaluation of the communicative behaviour of OR teams

In conclusion

- A rhetorical approach can provide critical insight into *what language does* on the clinical team
- Innovation and tension go hand in hand, as the humanities engage with traditional medical paradigms

Acknowledgements

Funding agencies:

- Canadian Institutes for Health Research
- BMO Financial Group Chair in Health Professions Education Research
- The P.S.I. Foundation

Research Collaborators:

- R. Reznick, S. Espin, G. Regehr, R. Baker, I. DeVito, B. Orser, E. Grober, J. Bohnen, D. Doran, B. Rubin, S. Whyte, M. Colmenares

SickKids[®]

LEARNING
INSTITUTE

the
Wilson
centre

gettyimages

Thank you

