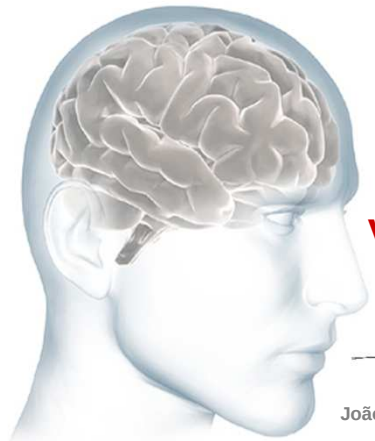

From Alzheimer's Association (2009).

Royal College of Nursing

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24 - 27 March 2009
Cardiff, UK

Verbal Communication with Unconscious Patients

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Introduction

- Qualitative (Baker and Melby, 1996) and quantitative (Holeckova *et al*., 2006) studies have shown evidence of the benefits of effective communication in the care of critically ill patients.
- Most comatose patients are initially hospitalized in intensive care settings where nursing care focuses on interventions to diminish disruptions in cognitive, physiological and psychosocial processes (Walker, 1998).
- Verbal communication is a way of orientating and providing meaningful sensory input to an unconscious patient.
- Verbal communication can help patients preserve self-identity and self-esteem and reduce social isolation (Elliot and Wright, 1999).

Purpose of our study

- **Characterise** and **standardise** verbal communication that critical care nurses and families use with unconscious patients.
- **Building** a **stimulus message** to be used with unconscious patients, to examine if the effects of familiar and unknown voices would be significantly different (blood pressure, pulse, oxygen saturation level, temperature, glycaemia level and ECG values were monitored as evidence of auditory perception).

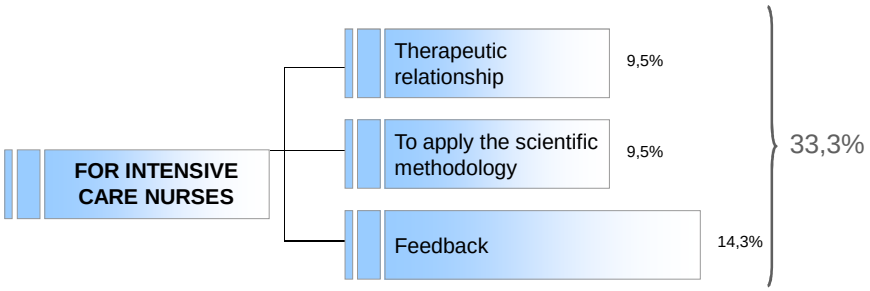
Method

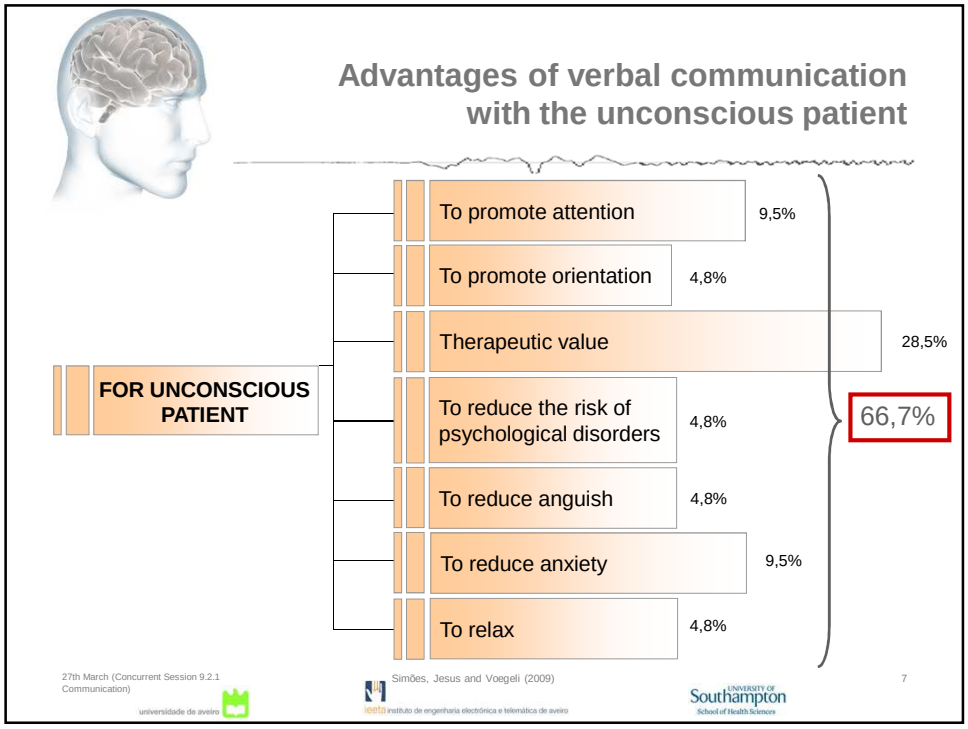
- The verbal communication of critical care nurses and patients' families, as reported in the literature, was thoroughly analysed, including references related to verbal communication by the patients' family and intensive care nurses.
- The results of the content analysis were used to build the stimulus message, which was further refined with the cooperation of a group of experts (speech and Language therapists, and psychologists).
- The stimulus message has an increasing degree of stimulation throughout: **pleasant contents** → **orders**

References' thematic areas

THEMATIC AREAS	Advantages of verbal communication with the unconscious patient	Responses of unconscious patients to verbal communication	Purpose of verbal communication by nurses	Purpose of verbal communication by patients' family
REFERENCES	• Baker and Melby (1996) • Danoy, Curallucci and Dor (1992) • Holeckova *et al* (2006) • Machado (1995) • Puma and Schiedermayer (1990) • Verity (1996)	• Danoy, Curallucci and Dor (1992) • Ferreira (2000) • Holeckova *et al* (2006) • Johnson, Omery and Nikas (1989) • Machado (1995) • Perrin *et al* (2006) • Puma and Schiedermayer (1990) • Walker, Eakes and Siebelink (1998)	• Baker and Melby (1996) • Doman *et al* (1993) • Danoy, Curallucci and Dor (1992) • Elliot and Wright (1999) • Ferreira (2000) • Holeckova *et al* (2006) • Hoyt (1996) • Machado (1995) • Puma and Schiedermayer (1990) • Verity (1996)	• Danoy, Curallucci and Dor (1992) • Hoyt (1996) • Machado (1995) • Puggina (2006) • Walker, Eakes and Siebelink (1998)
TOTAL NUMBER	6	8	10	5

Advantages of verbal communication with the unconscious patient




Advantages of verbal communication with the unconscious patient
FOR UNCONSCIOUS PATIENT
To promote attention
9,5%
To promote orientation
4,8%
Therapeutic value
28,5%
To reduce the risk of psychological disorders
4,8%
To reduce anguish
4,8%
To reduce anxiety
9,5%
To relax
4,8%
66,7%
27th March (Concurrent Session 9.2.1 Communication)
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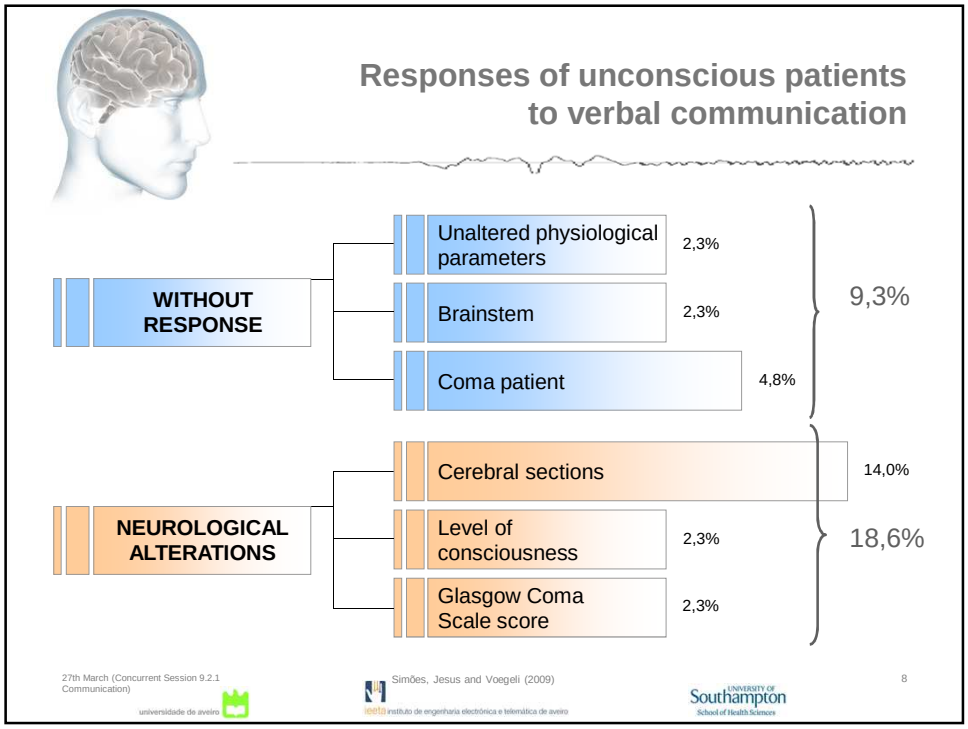
Responses of unconscious patients to verbal communication
WITHOUT RESPONSE
Unaltered physiological parameters
2,3%
Brainstem
2,3%
Coma patient
4,8%
9,3%
NEUROLOGICAL ALTERATIONS
Cerebral sections
14,0%
Level of consciousness
2,3%
Glasgow Coma Scale score
2,3%
18,6%
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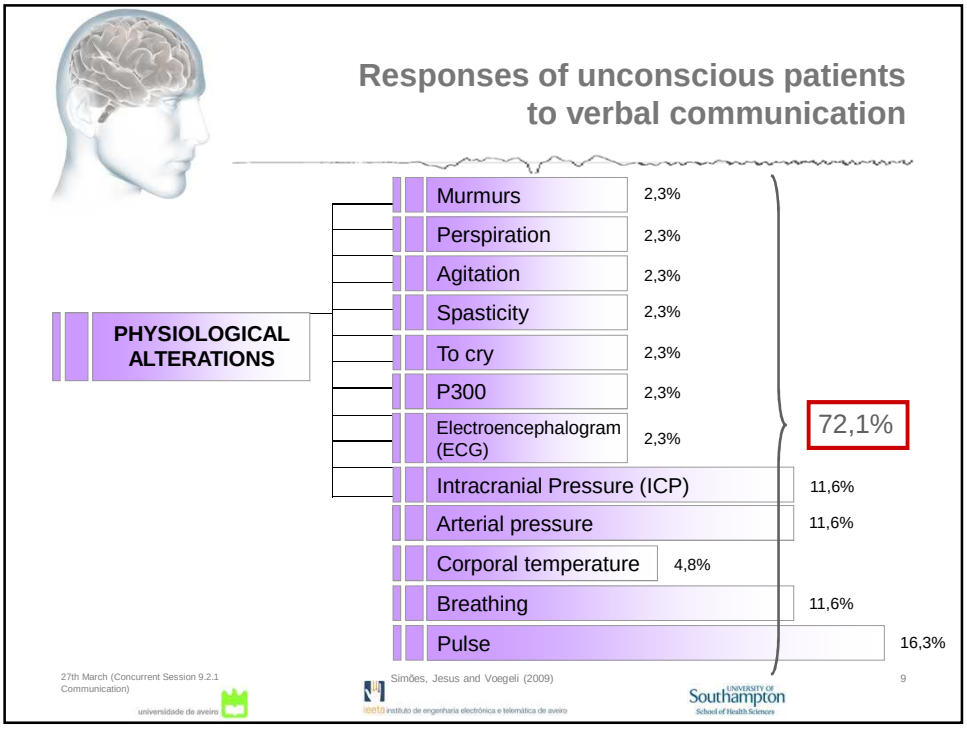
Responses of unconscious patients to verbal communication
PHYSIOLOGICAL ALTERATIONS
Murmurs 2,3%
Perspiration 2,3%
Agitation 2,3%
Spasticity 2,3%
To cry 2,3%
P300 2,3%
Electroencephalogram (ECG) 2,3%
72,1%
Intracranial Pressure (ICP) 11,6%
Arterial pressure 11,6%
Corporal temperature 4,8%
Breathing 11,6%
Pulse 16,3%
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Simões, Jesus and Voegeli (2009)
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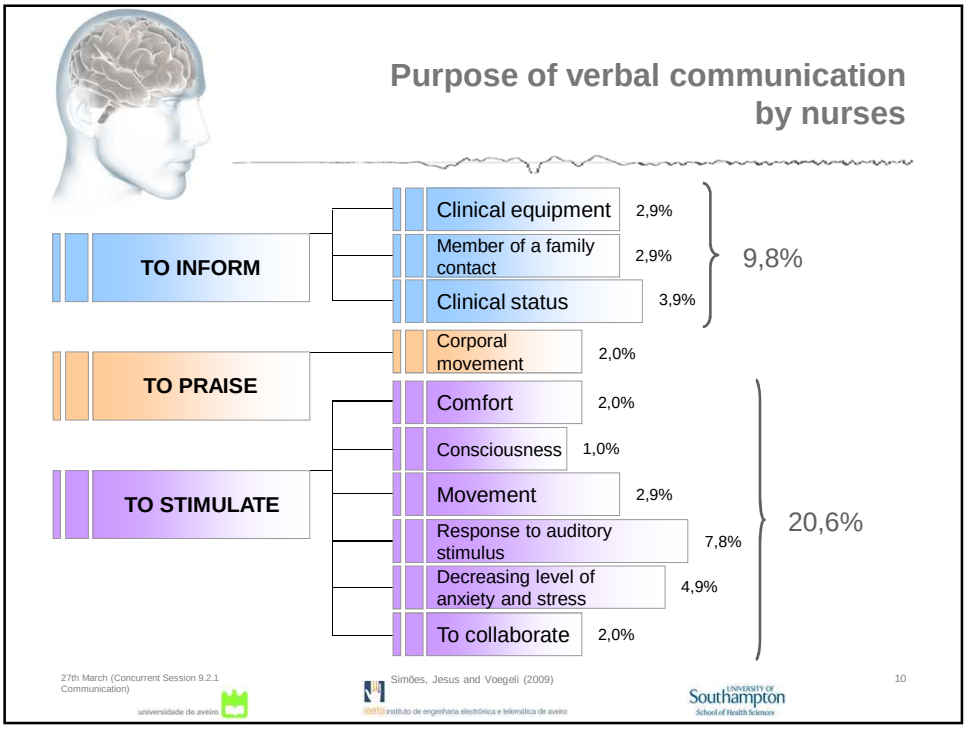
Purpose of verbal communication by nurses
TO INFORM
Clinical equipment 2,9%
Member of a family contact 2,9%
Clinical status 3,9%
9,8%
TO PRAISE
Corporal movement 2,0%
TO STIMULATE
Comfort 2,0%
Consciousness 1,0%
Movement 2,9%
Response to auditory stimulus 7,8%
Decreasing level of anxiety and stress 4,9%
To collaborate 2,0%
20,6%
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Simões, Jesus and Voegeli (2009)
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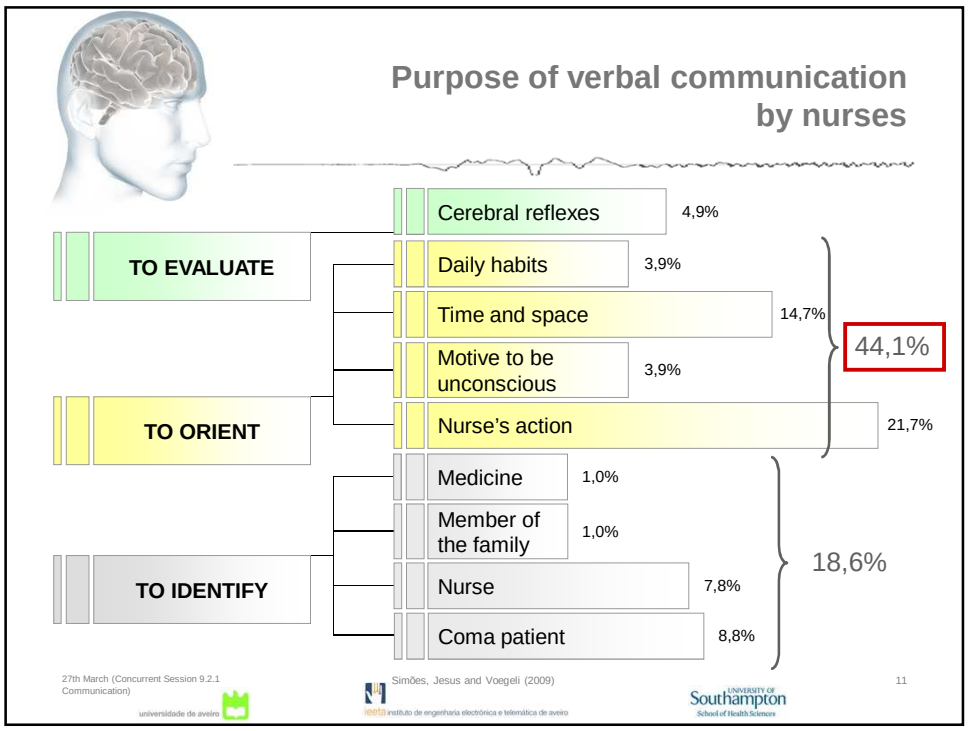
Purpose of verbal communication by nurses
TO EVALUATE
TO ORIENT
TO IDENTIFY
Cerebral reflexes 4,9%
Daily habits 3,9%
Time and space 14,7%
Motive to be unconscious 3,9%
Nurse's action 21,7%
44,1%
Medicine 1,0%
Member of the family 1,0%
Nurse 7,8%
Coma patient 8,8%
18,6%
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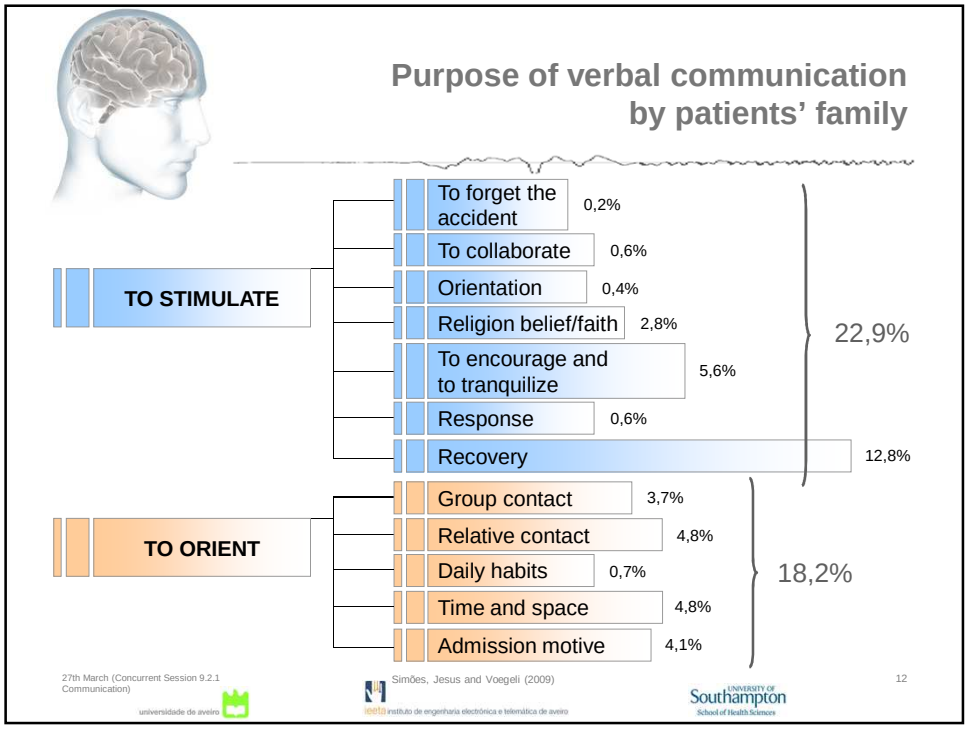
Purpose of verbal communication by patients' family
TO STIMULATE
TO ORIENT
To forget the accident 0,2%
To collaborate 0,6%
Orientation 0,4%
Religion belief/faith 2,8%
To encourage and to tranquilize 5,6%
Response 0,6%
Recovery 12,8%
22,9%
Group contact 3,7%
Relative contact 4,8%
Daily habits 0,7%
Time and space 4,8%
Admission motive 4,1%
18,2%
27th March (Concurrent Session 9.2.1 Communication)
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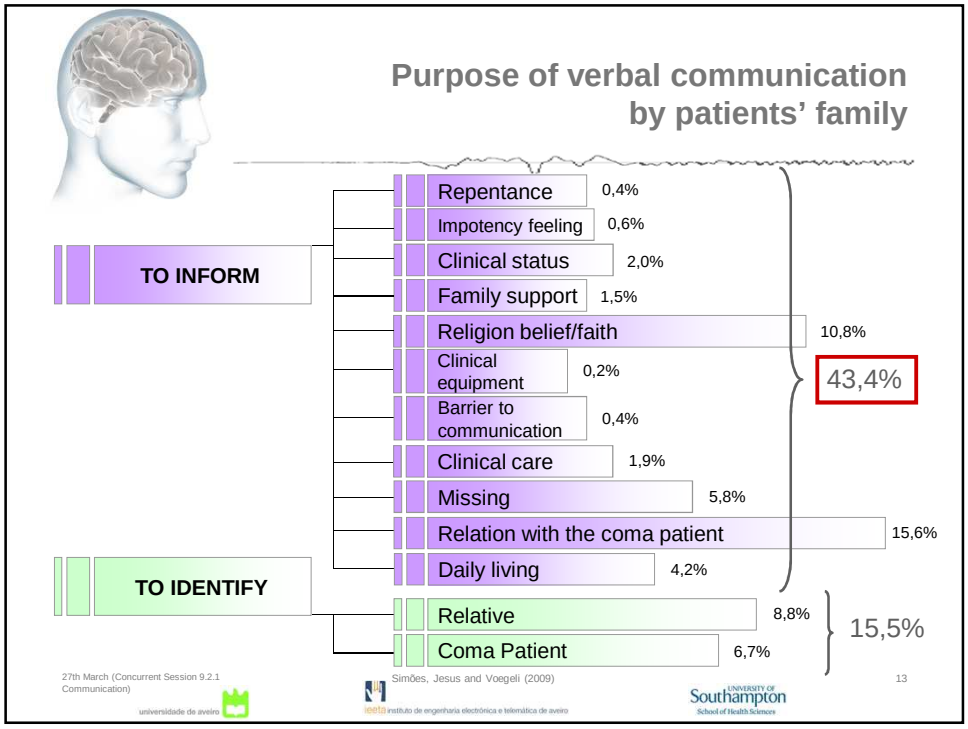
Purpose of verbal communication by patients' family
TO INFORM
Repentance 0,4%
Impotency feeling 0,6%
Clinical status 2,0%
Family support 1,5%
Religion belief/faith 10,8%
Clinical equipment 0,2%
Barrier to communication 0,4%
Clinical care 1,9%
Missing 5,8%
Relation with the coma patient 15,6%
Daily living 4,2%
43,4%
TO IDENTIFY
Relative 8,8%
Coma Patient 6,7%
15,5%
27th March (Concurrent Session 9.2.1 Communication)
Simões, Jesus and Voegeli (2009)
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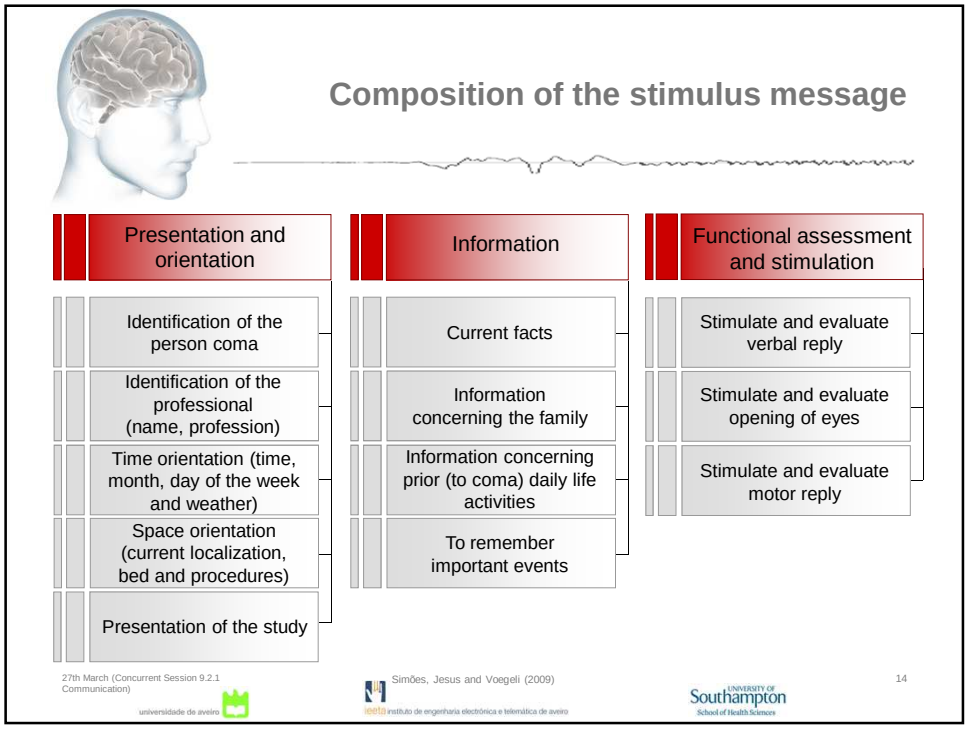
Composition of the stimulus message
Presentation and orientation
Identification of the person coma
Identification of the professional (name, profession)
Time orientation (time, month, day of the week and weather)
Space orientation (current localization, bed and procedures)
Presentation of the study
Information
Current facts
Information concerning the family
Information concerning prior (to coma) daily life activities
To remember important events
Functional assessment and stimulation
Stimulate and evaluate verbal reply
Stimulate and evaluate opening of eyes
Stimulate and evaluate motor reply
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Stimulus message

Presentation and orientation

- *Bom dia Senhor(a) A (no caso da pessoa significativa deve dizer o nome pelo qual era habitual chamar a pessoa em coma). Como se está a sentir hoje?*
- *O meu nome é B e sou um dos enfermeiros que está a cuidar de si (no caso da pessoa significativa deve identificar-se dizendo o seu nome e grau de parentesco ou vinculação).*
- *Hoje é dia x de (mês), é (dia da semana) e são y horas da manhã. Está uma manhã cinzenta e fria característica de Inverno (se for outra época do ano deve-se adaptar).*
- *Agora está numa enfermaria de cuidados intensivos para termos oportunidade de cuidar melhor de si e vigiarmos continuamente se está tudo bem. Está numa sala diferente com muitos aparelhos e muitas pessoas a circular (no caso da pessoa significativa deve referir que são os enfermeiros, médicos e outros profissionais que estão a cuidar dele(a)).*

Stimulus message

Information

- *Não sei se já tentou comunicar connosco, ou até se lhe prestaram atenção quando o tentou fazer anteriormente, mas tente agora. Nós não sabemos se o senhor nos consegue ouvir, mas pensamos que sim, por isso vamos estar atentos*
- *Tal como já lhe disse, estive a conversar com a sua família e queria dizer-lhe que está tudo bem com ela. Os seus familiares disseram-me que gostam muito de si e que esperam que recupere rapidamente. O Senhor gosta da sua família?*
- *Quando conversei com a sua família também me disseram que o senhor é professor de Português. Disseram-me que gosta muito daquilo que faz. Deve ser interessante poder ensinar outras pessoas. Sente saudades dos seus alunos? (deve-se adequar esta parte à profissão da pessoa em coma).*

Stimulus message

- *Senhor(a) A consegue falar?* [Pausa] *Vamos, tente falar.* [Pausa] *Agora tente mexer a língua e os lábios. Devagar, tente mexer a sua língua e os seus lábios.* [Pausa] *Senhor(a) A continue, vamos, continue a tentar, mexa a sua língua e os seus lábios.* [Pausa]
- *Senhor(a) A tente abrir os olhos.* [Pausa] *Conseguiu ouvir-me?* [Pausa] *Senhor(a) A tente abrir os seus olhos.* [Pausa] *Vamos, tente abrir os seus olhos.* [Pausa] *Senhor(a) A, eu estou aqui para o ajudar, vamos, abra os seus olhos.* [Pausa]
- *Senhor(a) A, agora vai tentar fazer outros movimentos, está bem?* [Pausa] *Vai começar por tentar levantar o seu braço direito.* [Pausa] *Consegue levantar o seu braço direito?* [Pausa] *Vamos Senhor(a) A, levante o seu braço direito*. [Pausa]

Functional assessment and stimulation

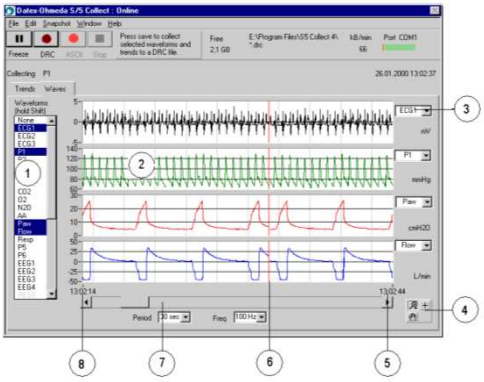
Conclusions

- The standard speech stimulus developed will facilitate the communication with the unconscious patients as assessed by the proposed physiological signals.
- The findings of this study highlight the need for formal support systems and continued education for nurses about the benefits of verbal communication.

Future work

- Monitoring the ECG signal, blood pressure, pulse frequency, oxygen saturation level, glycaemia level and temperature, before, during and after the auditory stimulation of the patient in coma with a **strange voice** and a **familiar voice**.
- The most significant person, whose voice we recorded, was selected using a **sociometry test**.
- The integrity of the auditory system will be evaluated in a preliminary phase based on **auditory evoked potentials**.
- Selection of coma patients will be based on the results of a thorough **assessment** using the **Portuguese version of the CRS-R**.

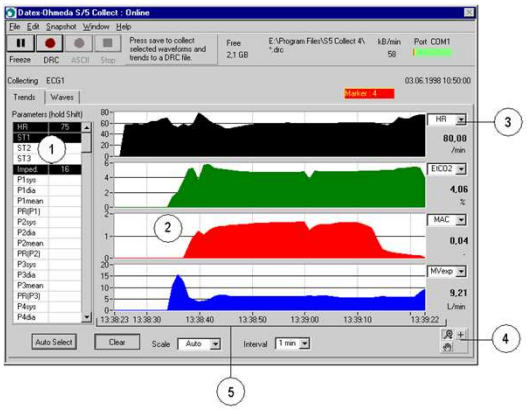
Collecting data with Datex-Ohmeda S/5 Collect



Online waveforms

1. Waveforms available for selection
2. A maximum of 4 waveform boxes
3. The waveform selected to be displayed in the first waveform box. The unit used is displayed under the selection box.
4. Use the graph palette to scroll the display area of the graph and to zoom in and out of sections of the graph.
5. Waveform end time
6. Red waveform cursor.
7. Scroll bar and scroll box. By moving the scroll box you can move to the desired part of the waveform.
8. Waveform start time

Collecting data with Datex-Ohmeda S/5 Collect



Online trends

1. Trends available for selection
2. A maximum of 4 trend boxes
3. The trend selected to be displayed in the first trend box. The latest numerical parameter value and the unit are also displayed.
4. Use the graph palette to scroll the display area of the graph and to zoom in and out of sections of the graph.
5. Trend times