

## Building good conversations through simulation: Perceived impact after training on bad news communication ☆,☆☆



### Construyendo buenas conversaciones mediante simulación: impacto percibido tras una formación sobre la comunicación de malas noticias

Dear Editor:

In 2015, the Patient Experience team was created in our hospital with the aim of incorporating the perspective of patients and their families to the operations of the centre. We reviewed how families experienced the care process in our hospital and identified the initial communication of the diagnosis as an opportunity for improvement. This led to the development of a guideline<sup>1</sup> aimed at all care providers, including those in clinical practice but also those offering psychosocial and spiritual support, to assist with the aspects that ought to be taken into account before, during and after the initial communication of bad news. To disseminate the contents of this guideline to professionals and therefore improve patient care, the team in the simulation programme of our hospital designed a 2-day face-to-face workshop that we will be describing in this article.

Day 1 of the workshop focuses on learning and practicing (through role play techniques) the Bridge model of interpersonal relations.<sup>2</sup> This model describes 4 relational styles based on 2 axes (active/reflexive and rational/emotional). The goal is to adapt our communication style to the style used by the person we are speaking to. On day 2, students participate in simulated scenarios acted out by professional actors. Each scenario is designed based on the profession and work setting of each participant to approximate their real-world experience and with the purpose of addressing one or more specific challenges. After each scenario, participants hold a group discussion (debriefing) led by experienced facilitators to reflect not only on the outcomes of their actions, but also on the underlying cognitive rules and reasoning that led to them.<sup>3</sup>

We conducted a descriptive and inferential study with the aim of assessing the perceived impact of this training. We followed the model described by Kirkpatrick<sup>4</sup> to eval-

**Table 1** Main characteristics of the 69 participants in the training.

Characteristic	n (%)
Female sex	54 (78)
<i>Professional occupation</i>	
Physician	33 (47.8)
Nurse	16 (23.2)
Medical resident	5 (7.2)
Social worker	5 (7.2)
Psychologist	4 (5.8)
Nurse assistant	2 (2.9)
Interpreter <sup>a</sup>	2 (2.9)
Physical therapist	1 (1.5)
Spiritual support	1 (1.5)
<i>Years of experience<sup>b</sup></i>	
<5	9 (14.5)
5–15	28 (45.2)
>15	25 (40.3)

<sup>a</sup> Interpreter that participates in the care of international patients.

<sup>b</sup> Of the total of 62 participants (that filled out the pre-training questionnaire).

uate the effect of the training. We obtained anonymous written assessments from the participants at 3 time points. The assessment before the training evaluated the baseline of each participant. The assessment immediately following the training assessed how participants perceived the training (Kirkpatrick level 1) and the degree of learning in the training (level 2). The assessment 6 months after the training evaluated the perceptions of participants after having communicated bad news in real life (level 3). The study was approved by the Clinical Research Ethics Committee of the hospital.

The study sample included the questionnaires of 69 professionals that participated in the training in 4 workshops delivered between September 2017 and July 2018 (Table 1). Participants expressed a high level of satisfaction with the training (Kirkpatrick level 1), with ratings of more than 4 points (out of 5) in every assessed aspect. As can be seen in Table 2, participants considered that they had acquired knowledge on how to deliver bad news in the training, and that this knowledge persisted 6 months later (level 2). When it came to real-world experience (level 3), more than 70% of participants reported they were able to apply 3 key behaviours: preparing the setting, identifying the interpersonal communication style and supporting the family.

We would like to highlight 3 elements of this training. First, a high appreciation of training in small groups including professionals in different fields and with different professional roles was expressed both in the debriefings and in the questionnaires. The shared reflection on situations that could happen in real life allowed participants a better understanding of the role played by each professional and facilitates the coordination of work.

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☆☆ Previous presentations: This study was presented in part at the III Congress of the Sociedad Española de Paliativos Pediátricos (March 2019), the 7th Congress of the Sociedad Española de Simulación Clínica y Seguridad del Paciente (April 2019) and the 25th Annual Meeting of the Society in Europe for Simulation Applied to Medicine, SESAM (June 2019).

**Table 2** Kirkpatrick Level 2 assessment of participants before, immediately after and 6 months after the in-person training, and comparison of knowledge before and immediately after training (learning during training) and immediately after training versus 6 months after training (maintenance of acquired knowledge).

Aspect assessed	Perception of learning during training			Perception of maintenance of acquired knowledge	
	Pre-training rating <sup>a</sup> (n = 62) (%)	Post-training rating <sup>a</sup> (n = 46) (%)	Comparison of pre-/post-training, P	Rating <sup>a</sup> 6 months after training (n = 39) (%)	Comparison post-training/6 months, P
I know what areas I need to prepare before communicating bad news	33.9	87	<.001	86.8	NS
I know what to do after delivering the bad news to help families feel supported	45.2	82.6	<.001	84.2	NS
I feel prepared to deliver bad news to patients and family members	35.5	89.1	<.001	84.2	NS
I have the necessary communication skills to deliver bad news	35.5	80.4	<.001	92.1	NS
I have the necessary skills to develop rapport with patients and their families	87.1	97.8	.045	97.4	NS
I am confident in my ability to deliver bad news	54.8	82.6	.002	89.5	NS

NS not significant.

<sup>a</sup> Percentage of participants that answered with 4 or 5 points (possible answers went from 1 to 5, with 1 indicating total disagreement and 5 total agreement).

Secondly, the scenarios played out by actors allowed a life-like experience that is very powerful for the purposes of reflection and learning. Other authors have reported beneficial effects of using actors, mostly based on the degree of realism achieved in the performance, the contribution of actors to the debriefing from the perspective of the family, how they conveyed emotions and their adaptability and ability to improvise.<sup>5</sup> Meyer et al. found that participants reported feeling better equipped to have difficult conversations, improved relational skills and decreased anxiety.<sup>6</sup>

Lastly, we want to highlight the novel approach of incorporating relational styles to communication in the health care setting. Although there are many psychometric tools to assess personality profiles, we opted for this model because it is easy to assimilate in a short period of time, specifically addresses individual relational styles, could be useful in other contexts and facilitates the integration of the concepts of individualised and family-centred care.

The main limitations of this study were that not all participants submitted every assessment and that the assessments of learning and changes in behaviour were subjective, based on the perceptions of the participants, and not on an objective evaluation.

In conclusion, we describe a training programme based on simulated scenarios that provides professionals with tools to

facilitate the initial communication of bad news. Professionals expressed a high level of satisfaction after the training and considered that they had acquired relevant knowledge and that they were able to apply this knowledge to real-world situations.

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## COVID-19: Fever syndrome and neurological symptoms in a neonate<sup>☆</sup>



### COVID-19: Síndrome febril y clínica neurológica en neonato

Dear Editor:

Coronavirus disease 2019 (COVID 19), caused by a novel coronavirus known as severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2), emerged in Wuhan, China, in late 2019. Since then, it has spread and caused a global pandemic. From the time of its detection to early April 2020, one million cases have been reported worldwide, including 100 000 in Spain.<sup>1</sup>

The first published paediatric studies with data of case series in China described an incidence in children ranging from 0.8% to 2% of the total reported cases, with a milder disease course compared to adults and a predominance of respiratory symptoms.<sup>1</sup>

We present one case of infection by coronavirus with an atypical course.

The patient was a male infant aged 26 days with an unremarkable history who was brought to the emergency department after experiencing 2 paroxysmal episodes, the first one with upward rolling of the eyes and generalised hypertonia lasting several minutes and associated with feeding, with the newborn requiring stimulation to end the episode. The second episode manifested with generalised hypertonia and facial cyanosis of several minutes' duration during sleep. There were no abnormal movements. On arrival to the emergency department, the infant was free of paroxysm, and presented with a fever of 12 hours' duration with nasal discharge and vomiting. The infant was exclusively breastfed, had adequate weight, had no history of gastro-oesophageal reflux and had normal bowel activity.

There was a relevant family history (living in close quarters with multiple symptomatic household members).

The findings of the physical examination were normal save for a mild hypertonia of the limbs and irritability, with no clonus, and mildly increased deep tendon reflexes with normal tone and normal alertness. Energetic crying.

Blood tests, blood, urine and stool cultures, a nasal wash respiratory virus panel and cerebrospinal fluid analysis were performed at admission. Due to the epidemiological

circumstances, a nasopharyngeal swab sample was tested for SARS-CoV-2. The complete blood count revealed a normal white blood cell count with lymphocytes on the lower range of normal (lymphocytes, 2100/ $\mu$ L). The platelet and red blood cell counts were normal. The results of the comprehensive metabolic panel were normal (liver and kidney function and electrolyte levels). We found elevated serum levels of creatine kinase (CPK, 380 U/L) and lactate dehydrogenase (LDH, 390 U/L). There were no coagulation abnormalities except for a mildly elevated level of fibrinogen (418 mg/dL). The C-reactive protein test was negative, as was the urine toxicology test.

During his hospital stay, the patient had fever the first 24 h (peak, 38.8 °C) associated with irritability and watery stools. Given this picture, viral antigen tests were ordered, the results of which were negative. The workup was completed with a cranial ultrasound examination that revealed no abnormalities. The patient was placed under continuous monitoring with amplitude-integrated electroencephalography (EEG) for 36 h, which revealed a continuous background patterns with sleep-wake cycles in the absence of electrical and clinical seizures.

Given the presence of fever associated with neurologic manifestations, empirical antibiotherapy was initiated until the cultures yielded negative results. The blood, urine, CSF and stool cultures were negative and the stool was negative for respiratory syncytial virus and influenza A and B virus. The polymerase chain reaction (PCR) test for detection of SARS-CoV-2 was positive.

The patient remained hospitalised for 6 days. He was isolated with implementation of droplet and contact precautions in a negative pressure room, and visits were restricted per the current protocol. The outcome was favourable, and the patient was afebrile since day 2. There was no evidence of convulsive seizures. The findings of the neurologic examination were age appropriate. The infant was discharged with recommendations of maintaining isolation at home, with a plan that included follow-up by telephone and an appointment for a clinical evaluation and an electroencephalogram in the paediatric neurology department.

We have described the case of a patient presenting with fever and neurologic manifestations. In the current epidemiological context, infants aged less than 3 months presenting with fever of unknown origin should be screened for coronavirus. As for the neurologic manifestations, we did not find references in the literature associating these symptoms with SARS-CoV-2. However, studies on other coronavirus types demonstrate that these respiratory viruses have neurotropic properties. There have been descriptions of patients with convulsions, febrile seizures, decreased level of consciousness, encephalomyelitis and encephalitis.<sup>2</sup>

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