

Use of crochet octopus for premature infants in the neonatal unit: an electronic news analysis

Uso do polvo de crochê em prematuros na unidade neonatal: uma análise de notícias eletrônicas

Uso del pulpo de ganchillo para bebés prematuros en una unidad neonatal: un análisis de noticias electrónicas

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ABSTRACT

Objective: to examine the arguments contained in the news published in the electronic media about the use of crochet octopuses in Brazilian neonatal intensive care units. **Method:** exploratory and retrospective documentary study, with a qualitative approach, which used 21 electronic news from 2017 to 2018 as data source. **Results:** improved vital signs and respiratory rate, stable heart rate, greater oxygenation were the main benefits for patients, premature babies. The most frequent arguments were authority, hard evidence and consensus. **Conclusion:** the news highlighted the benefits of the use of crochet octopus by newborns admitted to the neonatal unit, especially before the technical inform from the Ministry of Health, when they were more numerous. However, there are no scientific studies that prove the instrument's effectiveness. The arguments identified in the study reveal convincing strategies that were used to form public opinion regarding the use of crochet octopus in premature infant.

Descriptors: Premature; neonatal ICU; press; humanization of care.

RESUMO

Objetivo: analisar os argumentos contidos nas notícias veiculadas na mídia eletrônica sobre o uso de polvos de crochê nas unidades neonatais de terapia intensiva brasileiras. **Método:** estudo documental exploratório, retrospectivo, com abordagem qualitativa, que utilizou como fonte de dados 21 notícias eletrônicas veiculadas de 2017 a 2018. **Resultados:** melhora dos sinais vitais e da frequência respiratória, frequência cardíaca estável, maior oxigenação foram os principais benefícios para os prematuros. Os argumentos mais frequentes foram de autoridade, provas concretas e consenso. **Conclusão:** as notícias ressaltaram os benefícios do uso do polvo de crochê pelos recém-nascidos internados na unidade neonatal, especialmente antes da nota técnica do Ministério da Saúde, quando foram mais numerosas. Entretanto, não há de estudos científicos que comprovem a eficácia do instrumento. Os argumentos identificados no estudo revelam estratégias de convencimento que foram usadas para a formação da opinião pública em relação ao uso do polvo de crochê em prematuros.

Descriptores: Prematuro; UTI neonatal; imprensa; humanização da assistência.

RESUMEN

Objetivo: analizar los argumentos contenidos en las noticias en medios electrónicos sobre el uso del pulpo de ganchillo en las unidades de cuidados intensivos neonatales brasileños. **Método:** estudio documental exploratorio y retrospectivo, con enfoque cualitativo, que utilizó como fuente de datos 21 noticias electrónicas de 2017 a 2018. **Resultados:** mejores signos vitales y frecuencia respiratoria, frecuencia cardíaca estable, mayor oxigenación fueron los principales beneficios señalados. Los argumentos más frecuentes fueron autoridad, pruebas contundentes y consenso. **Conclusión:** las noticias destacaron los beneficios del uso del pulpo por los recién nacidos ingresados en la unidad neonatal, especialmente antes de la nota técnica del Ministerio de Salud, cuando eran más numerosos. Sin embargo, no hay estudios científicos que demuestren la efectividad del instrumento. Los argumentos identificados en el estudio evidencian estrategias convincentes que se utilizaron para formar la opinión pública sobre el uso del pulpo en los bebés prematuros.

Descriptores: Prematuro; uti neonatal; prensa; humanización de la atención.

INTRODUCTION

Prematurity is one of the causes of child mortality of international concern¹. Nowadays, about 15 million premature newborns (NB) are born every year worldwide. Brazil is among the ten countries with the highest rates, which account for 60% of the world's premature births².

Hospitalization of premature NB in the neonatal intensive care unit (NICU) has implications for the mother-baby bonding process, especially in the face of feelings of insecurity and family uncertainty³.

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The National Humanization Policy foresees several actions aimed at respecting individualities, ensuring the use of technology that allows the safety and care of newborns and their families, with emphasis on developmental care and promotion of the parent-baby bond⁴. In this sense, the Kangaroo Method, as a care model, enables advances in stimulating the presence and participation of the family in the NB care, in establishing skin-to-skin contact, and in changing care posture, in order to respect the individualized needs of each baby⁵.

Articulating technology and humanized care transforms the place of pain and suffering into an environment that inspires perseverance for the maintenance of life⁶. To this end, different strategies have been published in the media and social networks such as: the use of networks in premature babies in incubators, the appreciation of drawings, prayers, letters made by the family in the Neonatal ICU, the use of toys, among others.

One of such humanization action was the *Spruttegruppen*, initiative, developed in Denmark. It has been integrated by parents of premature babies since 2013 when they created the *Octo Project* for free distribution of crocheted octopuses to hospital units in order to adopt practice with babies in incubators. This action arrived in Brazil through electronic media in early 2017 and was disseminated in various NICUs in the country. This implied social mobilization of volunteers in the making and donating octopuses for non-governmental organization, and their distribution in the concerned units⁷.

In view of the publication of the crochet octopus artifact, the Ministry of Health (MH) acknowledged the media dissemination and took a position, through Technical Note No. 08/2017 for not applying this product for therapeutic purposes, but recognizing that its repercussion also represents the rescue of the playful dimension with these babies⁸.

Thus, the use of crochet octopus in premature babies gained visibility especially through electronic news. It is known that the information obtained through the news is also conditioned to the socio-cultural context in which it was produced and, subjectively, to those who collaborated with its production⁹. Thus, recognizing the communicational relevance of the *internet* and its strong influence today, this paper aims to analyze the arguments contained in the news in the electronic media about the use of crochet *octopus* in the NICU.

THEORETICAL-METHODOLOGICAL REFERENCE

For the analysis of news published in the media, we use the framework of Communication Theory on the Argumentation Technique, composed of the following elements: authority argument, consensus-based argument, evidence-based argument, logical reasoning-based argument, and argument focused on language competence¹⁰.

This is a documentary research¹¹, based on electronic news published about the use of crochet octopus in the NICU. To do so, the search was performed on the Google search site, with the following keywords: octopus, premature, neonatal intensive care unit and Brazil, selecting the news tab from the search engine with the beginning time frame of the publications in 2017 extending to 2019, justified by the timeliness of the topic, even before the MH Technical Note.

Journalistic articles of adherence to the object of analysis were included, excluding duplicates, and two figures were organized with this material. The first illustration with the elements: news title, date of publication, source of publication, institution and city of the selected news and the second with the synthesis of the content of the articles, highlighting the necessary material resources, hygiene and their use, use, professionals categories mentioned and absence of scientific evidence.

RESULTS AND DISCUSSION

The search results for the news totaled 112 records that subjected to the temporal and adherence criteria, were reduced to 21 news¹²⁻³², which gave rise to Figure 1. It is noteworthy that although the time frame predicted the period from 2017 to 2019, only news on the topic were found in 2017 and 2018.

In general, the news dealt with the use of octopus, the benefits, the experience of professionals, mothers and artisans, and organizations related to making the octopus.

The synthesis of news content is presented in Figure 2.

In argumentative terms the news leads the reader to reflect on the use of octopus as a humanization artifact, as can be identified in Figure 2. In the NICU, in addition to the physical recovery of the NB, there is awareness of using means/measures to reduce the stress of babies and family, aiming to reduce the negative effects and/or psycho-emotional, behavioral, motor problems triggered by the disease or by stressful environment³³.

Title	Date:	Source	Institution/ City
Crochet Octopuses Help To 'Welcome' Babies in Santa Maria ICU ¹²	3/29/2017	G1, DF	Santa Maria Hospital - Federal District
Public Hospitals Use Crochet Octopus to Treat Premature Babies ¹³	3/31/2017	Agência Brasília	Taguatinga, Ceilândia and Santa Maria Regional Hospital
Crochet Octopuses Will Help Babies in Hospital Treatment In BH ¹⁴	4/6/2017	O Tempo	Municipal hospitals of Belo Horizonte (MG)
Octopus "Population" To Help Children ¹⁵	4/10/2017	Jornal de Brasília Pioneiro	Neonatal ICU of the Federal District
Crochet Octopuses Help to Accommodate Newborns in HG's Neonatal ICU in Caxias ¹⁶	4/12/2017	G1 PR	General Hospital - Caxias do Sul
Crochet Octopuses Help Calm Premature Babies in Curitiba ¹⁷	4/22/2017	G1 AP	Curitiba Maternity
Inspired by Danish Idea, Woman Produces 15 Crochet Octopuses and Donates to Maternity Babies in Amapá ¹⁸	4/28/2017	G1 DF	Mother Luzia Maternity Hospital - Macapá (AP)
Volunteers Crochet Octopuses for Premature Babies From DF ¹⁹	4/29/2017	G1 Rio Preto and Araçatuba	North Wing Regional Hospital - Águas Claras
Crochet Octopuses Help Calm Premature Babies in Araçatuba ²⁰	4/30/2017	G1 DF	Araçatuba
Ministry of Health Does Not Recommend Using Crochet Octopuses in Incubators; Understand It ²¹	5/2/2017	G1 DF	Santa Maria Hospital
Artisan Donates Woolen Octopuses to Help Premature Babies Recover in Barbacena Hospital ²²	5/7/2017	G1 Zona da Mata	Holy House of Barbacena - Campos das Vertentes
Crochet Octopuses Made by Artisans from Uberlandia Help Improve Babies' Condition in Neonatal ICU ²³	5/9/2017	G1 – MGTv	Clinical Hospital of the Federal University of Uberlandia
Craftswoman Crochet Octopuses to Help Premature Babies In ES ²⁴	6/5/2017	TV Gazeta – G1 ES	São José Hospital and Maternity - Linhares
Project Makes Crochet Octopuses for Premature Babies from Joinville ²⁵	6/28/2017	A Notícias	Dona Helena Hospital - Joinville
Crochet Little Octopus Change the Condition of Babies in Resende Neonatal ICU, RJ ²⁶	8/9/2017	G1 Sul do Rio and Costa Verde	Neonatal ICU Resende (RJ)
Crochet Octopuses: Better Positioning in Votuporanga Neonatal ICU ²⁷	11/10/2017	Folha Regional	Holy House of Mercy of Votuporanga (SP)
Work by Artisans Helps in The Recovery of Babies in A Hospital In AL ²⁸	2/18/2018	O Globo	Arapiraca Regional Hospital (AL)
Health Introduces Crochet Octopus Therapy for Premature Babies ²⁹	4/3/2018	PMSBC – Portal ABC do ABC	University Municipal Hospital (HMU) of São Bernardo do Campo (SP)
Rocha Faria Hospital Welcomes Volunteers to Crochet Octopuses for Baby ³⁰	6/19/2018	Extra	Rocha Faria Hospital - Rio de Janeiro
Santa Maria Hospital, DF, Holds Event to Support Parents of Premature Babies ³¹	11/28/2018	G1 DF	Santa Maria Hospital
Crochet Octopuses Help Recover Babies in ICUs ³²	12/1/2018	Dourados Agora	Evangelical Hospital of Dourados (MS)

FIGURE 1: Electronic News About the Use of Octopus in A Neonatal ICU. Rio de Janeiro, 2017-2018.

It is well known that the use of toys promotes better neurocognitive development³⁴. Nursing needs to learn to work with the playful dimension, as it is part of human needs, facilitating interpersonal relationships between family and team³⁵.

From material to technique	Threads 100% in cotton blanket or silicon fiber and antiallergic of embroidery should be firm - crochet - the stitches tightly closed, with seven rows of crochet with a certain number of stitches, eyes and mouths sewn, without using paint, glue or plastic eyes ^{12-16,18-22,24,25, 27-28,31} .
Dimensions	8 tentacles 20 to 22 centimeters long with head measuring 8 to 10 centimeters, being larger than babies with 30 centimeters ^{14,15,18,19,21,28} .
Hygiene and sterilization	Process occurs prior to use of octopus, within 5 to 7 days, from use if necessary, whenever possible, before delivery and during hospitalization or only reports that octopuses are sterilized, but do not define period ^{12-15,17-19,21-24,26-29,32} .
Use	It is indicated for use babies who are not in isolation and not intubated, as well as in home use ^{12-15,19-23,25-27,29,32} .
Professional quote	They cite doctors and field specialists, nurses and nursing technicians, physiotherapists and psychologists ^{12-15,17-29,32} .
Social and clinical benefits	Related to the similarity of the tentacles to the umbilical cord and the sensation of the uterus. Other benefits with regard to clinical conditions, improved vital signs, respiratory system regulation, cardiac weight gain, reduced crying, decreased pain and stress, NB improved positioning/posture, improved sleep quality and promotion of comfort ^{12-18,20-29,31,32} . Humanization has been reported, as well as the artifact being a therapeutic toy in the sense of babies' interaction with the octopus, the embracement of the NB in the neonatal ICU, the playful effect provided by the octopus for mothers and the NB, and the bonding effect with the outside world to the incubator ^{12-14,16,17,19-23,27,29,32} .
Absent scientific evidence by MH	It has no scientific evidence and is not a therapeutic instrument. In addition, the crochet octopus does not replace the kangaroo position, only complements it ^{13,14,21-26} . The Ministry of Health does not prohibit the use of the artifact, but also does not recommend it in incubators with newborns, being the responsibility of the professional.

FIGURE 2: Summary of contents by subject of journalistic news. Rio de Janeiro, 2017-2019.

Argumentation Techniques

The first type of argument identified in the news was that of language proficiency¹⁰. This refers to the use of appropriate vocabulary to the situation to give credibility to linked news, such as the use of cultured norm and technical terms. In them were found 17 excerpts containing this type of argument, among which stand out:

They observed that premature babies near the octopuses in their incubators had more regular heartbeats, better respiratory rate, and higher blood oxygenation levels¹⁴.

Reports are of improved vital signs and faster weight gain. In addition, the octopus prevents them from pulling the probe³².

The terms *vital signs, respiratory rate, regular heartbeat, oxygenation probes* and *catheters* are part of the scientific language in healthcare and are commonly used by professionals. By reading these expressions, the reader puts his or her belief in the transmitted message, even with possible difficulty in understanding, but understanding by the context of journalistic material.

Another argument identified was that of authority. This occurs with the quotation of people, because it is the articulation of scientific language to the testimony of the deponents, enhancing the message conveyed¹⁰. We found 89 discursive excerpts from family members of the baby, nurses, nursing technicians, psychologists, unit coordinators, physicians, physiotherapists, the Department of Health and the Ministry of Health, among which stand out:

According to Luísa Barroca, head of the Perinatal Psychology Department of Brasília Maternity, the sensation refers to pregnancy¹⁵.

Pets are part of an initiative imported from Denmark and, according to the Secretariat of Health, have a proven positive effect on the clinical status of newborns¹².

The concrete evidence argument is another technical element. This is applied by journalists for number, statistics, historical data, facts of the experience, because when presented, they give the sensation of veracity of the subject, beyond mere opinion¹⁰. The identification pointed to 60 excerpts, exemplified below:

One of the evidences of this evolution in the clinical picture is Eloá, born at seven months. The mother said she was born with 900g and, after the project, she already breathes without the aid of devices, only using a probe²⁶.

Vitor received his blue octopus in May and since then about 15 children have also been presented with a little friend. When the project began, the crochet pet of just over 20 centimeters was larger than the baby, who was born with only 730 grams²⁵.

Logical reasoning argumentation focuses on cause and consequence relationships¹⁰ has been identified in 20 pieces of news, including:

The toy is placed inside the incubator so that the child can interact naturally, containing the body and giving security, warmth and cuddling to the little ones¹⁸.

Octopuses engage babies and increase the feeling of incubator embracement, avoiding crashes and accidents on the bed walls²¹.

The last identified argument was based on the consensus, which deals with self-evident or universally accepted propositions, for the desirable purposes¹⁰ located in 36 excerpts, of which we highlight:

To avoid any health problems to babies, crochet pets need to be sterilized every five to seven days - or sooner if needed, as contact with some secretions; always with water higher than 60 degrees¹⁸.

It is important that each newborn has its own octopus for its safety¹⁴.

These refer to the consensus that there should be no contamination in the hospital, especially related to the patient, emphasizing the importance of the object being of personal use and the need for sterilization. The Ministry of Health explains the discussions about the presence of toys in the NICU incubators and the favoring of infections, but informs that the use of toys has benefits and the hospital's infection control protocols should be respected⁸.

After birth, there is parental expectation of being able to build affective bond with the baby through cuddling, kissing, hugging, long-term stares, and other strategies of affection, but premature birth imposes difficulties given the conditions of clinical instability and technology dependence. Therefore, it is up to the health team to transmit safety to parents and use strategies to strengthen the process of building affection through a relationship that aims to increase autonomy^{5,36}.

Although three reports mention the scientific evidence of the benefits of using octopus, none of them report which papers support them. Example of this is the excerpt:

According to the DF Health Department, it has a proven positive effect on the clinical situation of newborns^{12, 15, 19, 21}.

In the Technical Note from the Ministry of Health, the agency does not recommend the use of octopus, but neither does it prohibit it. It reinforces the importance and scientific soundness of skin-to-skin contact through the Kangaroo Method. Characterizes the octopus as a toy and not a therapeutic instrument, which can be replaced by any other form of animal or object⁸.

In the NICU, the premature baby encounters a stressful extrauterine environment due to numerous manipulations, invasive procedures, noise, excessive lighting, postural disorganization. Such situations need to be addressed, as pain management and stress reduction should be priority aims in the list of impact actions for premature babies development³⁷. So, different strategies have been developed for this purpose, such as rollers, nests produced with fabric and the *swaddle* (wrap the baby)³⁸.

In this line of thought, the Ministry of Health emphasizes that the correct positioning and its benefits for the premature baby should be safeguarded. Therefore, the octopus artifact may resemble a roller, depending on its application in the care of premature babies⁸.

Given the arguments identified in the news, the reader organizes his opinion about the use of the octopus and the credibility of that news, leading the decision-making regarding the information. If the reader's attitude is to adopt the artifact, it can be theoretically explained by the communication field technique, known by the acronym AIDA (Attention, Interest, Desire and Action)³⁹. This leads to the understanding that it provokes/stimulates in the reader initiative or decision-making, even if (in)consciously, about the use or not of the octopus artifact.

CONCLUSION

The news mostly highlighted the benefits of using crochet octopus by NICU newborns, but there is no mention of scientific studies that prove the effectiveness of the instrument.

Based on the arguments used by the media writers, this study allowed to identify the convincing strategies that were used to form public opinion regarding the use of octopus in premature babies in the NICU. Whether to accept them or not is up to the reader, it is even worth considering the repertoire. This helps to understand the importance of the editorial line of the media, which was not contemplated in this research, and therefore its limitation, consequently further studies should be promoted to deepen the theme.

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