Clowns: a review about using this mask in the hospital environment

Mariana Sato(a)

Artur Ramos (b)

Carolina Costa Silva (c)

Gustavo Rosa Gameiro (d)

Camila Morato da Conceição Scatena(e)

(a) Fundação Faculdade de Medicina, Faculdade de Medicina, Universidade de São Paulo (FMUSP). Rua Dr. Ovídio Pires de Campos, 171, Jardim América. São Paulo, SP, Brasil. 05403-010. marianaesato@ gmail.com

(b,c,d) Acadêmicos, FMUSP. São Paulo, SP, Brasil. artur.ramos@usp.br; carolina.costa.silva@ usp.br; gustavo.gameiro@ usp.br

(e) Universidade Federal do Mato Grosso. Cuiabá, MT, Brasil. cascatena@gmail.com

Groups of voluntary or professional artists have been formed in order to visit patients in hospitals around the world, as clowns, using humor as a tool to promote the care and recovery process. There are few studies on this topic in the scientific literature. Thus, construction of a theoretical field that is able to support this activity is only just beginning. Therefore, we conducted a bibliographic review based on 33 papers about different clown groups acting in different hospitals worldwide, in order to better comprehend how these visits take place and how they can effectively achieve good results. It was observed that these encounters can establish deep relationships that are capable of creating new meanings for the hospital environment, empowering patients and serving as a relationship model for all the healthcare staff involved.

Keywords: Clown. Care. Art.

Introduction

"The doctor listened to all this, without interrupting me. And to me, this listening that he offered me almost cured me. Then I said: I am already treated, just with the time that gave me, doctor. It is this that, in my life, has been scarce: offer to listen to me, ears for my confessions".1

(p. 149)

For a long time, masks have been used in rites and cure procedures. In tribal rituals and in the origins of the western medicine, the art associated to objects that represent divinities or human



archetypes are present as support in the treatment of illnesses. In the contemporaneity, the clown's mask has acquired a great importance, mainly starting from 1986 when Michael Christensen, one of the founders of Big Apple Circus (one of the most important circuses in the world) was invited to a presentation in New York's Babies and Children's Hospital. Him and his collegue, Jeff Gordon, made a parody of the medical procedures, that constituted the base for the foundation of Big Apple Circus Clown Care Unit, one which today has eighty clowns visiting about two hundred and twenty-five thousand children a year.

Many groups around the world follow the model of Big Apple Circus, through professional clowns' work, as the Doctors of Joy (Brazil), the Humour Foundation (Australia) and the Le Rire Médecin (France), among others. Parallel, an expressive number of volunteers' groups have formed, that, in spite of motivated by good will, many times lack methodology and knowledge about the performance of this persona within the hospital environment, and could cause a series of damages, from the embarrassment and rejection by the professionals, patients and companions to the possible increase of the risk of hospital infection. Therefore it is necessary to establish a theoretical and technical field that subsidizes the clowns' practices within the hospital, favoring the outreach of benefits. The objective of this revision is to collect the available data in the scientific literature regarding the interventions based on clowns in the hospital and, to contemplate how this work can be better conducted by professionals as well as volunteers.

Methods

A bibliographical research with the collection of scientific articles in English, Portuguese and Spanish published until May 19, 2015 was carried out. For the search of these articles, we used the following data bases for academic researches: MedLine (PubMed) and Virtual Library in Health (BVS).

In the search accomplished through the PubMed base, the descriptors employed were clown and hospital. Of this research, we obtained 43 results of which 17 were available for access in the University of São Paulo (USP) and were adequate for the theme proposed: a recognition of the adopted paradigms and the respective effects of the clowns' performances within hospitals.

In the research accomplished through BVS, we made two independent searches: the first with the descriptor "palhaço" and the second with the despcritor "clown" to include the different terminology used in Brazil to describe this figure that, in this work, interests us. In both searches filters were applied that selected the journals Lilacs (Latin-American System and of Caribbean of Information in Sciences of the Health), BDENF (Base of Data of Nursing) and IBECS (Index Bibliographical Spanish of Sciences of the Health). With the first descriptor, we found 14 articles and with the second, 22. Removing the duplicated articles and the ones not available for access in USP, we obtained 16 results.



We proceeded with the integral reading of the original articles and selected the main categories and subthemes to be developed as follows.

Table 1 with the 33 articles read and considered in this revision.

Table 1. Articles used in the revision

The graduation students' perception about the performance of the "doctor clown" in a university hospital. Mota et al.	Title	Authors
Dialogía of the laughter: a new concept that introduces happiness for the promotion of health leaning on the dialogue, the laughter, happiness and on the art of clowning. Interactions between volunteers and users in paediatric onco-hematology. A study regarding 'clown-doctors.' Happiness for the Health: The art of clowning as proposal of social technology for the Unique system of Health. The art of the clown theater in the care of hospitalized children. The Doctors of the Happiness in the pediatric ward: experience of the nursing team. Divieria & Oliveira & Oliveira El teatro clown en el entorno sanitario. Clowns: a possible reflection for the Gestalt-therapy. Tsallis Doctors of Ethics of happiness Masetti Doctors of Grace: The child speaks Aquino et al. El humor como estrategia terapéutica en niños hospitalizados en unidades pediatricas en Pereira (Colombia) - Reporte de una experiência Humor in the "Twillight Zone" - My Work as a Medical Clown with Patients with Dementia Raviv More than just clowns - Clown Doctor rounds and their impact for children, families and staff The effect of a Medical Clown on Pain During Intravenous Ac-cess in the Pediatric Emergency Department: A randomized Prospective Pilot Study Clowning as a supportive measure in paediatrics - a survey of clowns, parents and nursing staff Barkmann et al. Clowns Benefit Children Hospitalized for Respiratory Pathologies Bertini et al. Parental anxiety and stress before pediatric anesthesia: A pilot study on the effectiveness of preoperative clown intervention Physiological and Emotional Responses of Disabled Children to Therapeutic Clowns: A Pilot Study The Life Threatened Child and the Life Enhancing Clown: Towards a Model of Therapeutic Clowning and Emotional Responses of Disabled Children to Therapeutic Clowns: A Pilot Koller e Gryski Linge Linge Linge Linge Linge Linge Linge Linge Linge Liound attachment: Children in magical relations with hospital clowns Linge Linge Linge Linge Linge Linge Linge	The graduation students' perception about the performance of the "doctor clown" in a university	Mota et al.
leaning on the dialogue, the laughter, happiness and on the art of clowning. Interactions between volunteers and users in paediatric onco-hematology. A study regarding "clown-doctors." Happiness for the Health: The art of clowning as proposal of social technology for the Unique system of Health. The art of the clown theater in the care of hospitalized children. Lima et al. Lima et al. The Doctors of the Happiness in the pediatric ward: experience of the nursing team. Clowns: a possible reflection for the Gestalt-therapy. Doctors of Statics of happiness Doctors of Grace: The child speaks El humor como estrategia terapéutica en niños hospitalizados en unidades pediatricas en Pereira (Colombia) - Reporte de una experiência Humor in the "Twillight Zone" - My Work as a Medical Clown with Patients with Dementia Raviv More than just clowns - Clown Doctor rounds and their impact for children, families and staff Ford et. al Wolyniez et al. Clowning as a supportive measure in paediatrics - a survey of clowns, parents and nursing staff Clowns Benefit Children Hospitalized for Respiratory Pathologies Parental anxiety and stress before pediatric anesthesia: A pilot study on the effectiveness of preoperative clown intervention Physiological and Emotional Responses of Disabled Children to Therapeutic Clowns: A Pilot Study Therapeutic clowning in paediatric practice Linge Linge Linge Linge Linge Linge Linge Linge Loesencial es invisible a los ojos: payasos que humanizan y promueven salud Ravidad attachment: Children in magical relations with hospital clowns Study Humour Sans Frontieres: The Feasibility of Providing Clown Care at a Distance Amfield et al.	hospital.	
Interactions between volunteers and users in paediatric onco-hematology. A study regarding "clown-doctors." Happiness for the Health: The art of clowning as proposal of social technology for the Unique system of Health. The art of the clown theater in the care of hospitalized children. Lima et al. Oliveira & Oliveira & Oliveira El teatro clown en el entorno sanitario. Palacin Clowns: a possible reflection for the Gestalt-therapy. Doctors of Ethics of happiness Maestti Doctors of Grace: The child speaks El humor como estrategia terapéutica en niños hospitalizados en unidades pediatricas en Pereira (Colombia) - Reporte de una experiência Humor in the "Twillight Zone" - My Work as a Medical Clown with Patients with Dementia More than just clowns - Clown Doctor rounds and their impact for children, families and staff The effect of a Medical Clown on Pain During Intravenous Ac-cess in the Pediatric Emergency Department: A randomized Prospective Pilot Study Clowning as a supportive measure in paediatrics - a survey of clowns, parents and nursing staff Clowns Benefit Children Hospitalized for Respiratory Pathologies Parental anxiety and stress before pediatric anesthesia: A pilot study on the effectiveness of preoperative clown intervention Physiological and Emotional Responses of Disabled Children to Therapeutic Clowns: A Pilot Study Therapeutic clowning in paediatric practice Joyful and serious intentions in the work of hospital clowns: A meta-analysis based on a 7-year research project conducted in three parts The Life Threatened Child and the Life Enhancing Clown: Towards a Model of Therapeutic Clowning Lo esencial es invisible a los ojos: payasos que humanizan y promueven salud Espinosa e Gutiérrez Rasidu: abordajes terapêuticos García et al. Magical attachment: Children in magical relations with hospital clowns Glown Doctors as a Treatment for Preoperative Anxiety in Children: A Randomized, Prospective Agnoli et al.	Dialogia of the laughter: a new concept that introduces happiness for the promotion of health	Matraca et al.
"clown-doctors." Happiness for the Health: The art of clowning as proposal of social technology for the Unique system of Health. The art of the clown theater in the care of hospitalized children. He Doctors of the Happiness in the pediatric ward: experience of the nursing team. Diveira & Oliveira & Oliv	leaning on the dialogue, the laughter, happiness and on the art of clowning.	
Happiness for the Health: The art of clowning as proposal of social technology for the Unique system of Health. The art of the clown theater in the care of hospitalized children. The Doctors of the Happiness in the pediatric ward: experience of the nursing team. El teatro clown en el entorno sanitario. El teatro clown en el entorno sanitario. Clowris: a possible reflection for the Gestalt-therapy. Doctors of Ethics of happiness Masetti Doctors of Grace: The child speaks El humor como estrategia terapéutica en niños hospitalizados en unidades pediatricas en Pereira (Colombia) - Reporte de una experiência Humor in the "Twilight Zone" - My Work as a Medical Clown with Patients with Dementia Raviv More than just clowns - Clown Doctor rounds and their impact for children, families and staff The effect of a Medical Clown on Pain During Intravenous Ac-cess in the Pediatric Emergency Department: A randomized Prospective Pilot Study Clowning as a supportive measure in paediatrics - a survey of clowns, parents and nursing staff Clowns Benefit Children Hospitalized for Respiratory Pathologies Bertini et al. Parental anxiety and stress before pediatric anesthesia: A pilot study on the effectiveness of preoperative clown intervention Physiological and Emotional Responses of Disabled Children to Therapeutic Clowns: A Pilot Study The apeutic clowning in paediatric practice Joyful and serious intentions in the work of hospital clowns: A meta-analysis based on a 7-year research project conducted in three parts The Life Threatened Child and the Life Enhancing Clown: Towards a Model of Therapeutic Clowning Linge Linge Linge Linge Colown Social es invisible a los ojos: payasos que humanizan y promueven salud Bagical attachment: Children in magical relations with hospital clowns Glown Doctors as a Treatment for Preoperative Anxiety in Children: A Randomized, Prospective Humour Sans Frontieres: The Feasibility of Providing Clown Care at a Distance Amfield et al.	Interactions between volunteers and users in paediatric onco-hematology. A study regarding	Araújo e Guimarães
system of Health. The art of the clown theater in the care of hospitalized children. The Doctors of the Happiness in the pediatric ward: experience of the nursing team. El teatro clown en el entorno sanitario. Clowns: a possible reflection for the Gestalt-therapy. Doctors of Ethics of happiness Doctors of Grace: The child speaks El humor como estrategia terapéutica en niños hospitalizados en unidades pediatricas en Pereira (Colombia) - Reporte de una experiência Humor in the "Twilight Zone" - My Work as a Medical Clown with Patients with Dementia Raviv More than just clowns - Clown Doctor rounds and their impact for children, families and staff The effect of a Medical Clown on Pain Durring Intravenous Ac-cess in the Pediatric Emergency Department: A randomized Prospective Pilot Study Clowning as a supportive measure in paediatrics - a survey of clowns, parents and nursing staff Clowns Benefit Children Hospitalized for Respiratory Pathologies Parental anxiety and stress before pediatric anesthesia: A pilot study on the effectiveness of preoperative clown intervention Physiological and Emotional Responses of Disabled Children to Therapeutic Clowns: A Pilot Study The Life Threatened Child and the Life Enhancing Clown: Towards a Model of Therapeutic Clowning Linge Linge Linge Linge Linge Linge Linge Linge Loesencial es invisible a los ojos: payasos que humanizan y promueven salud Espinosa e Guttérrez Rasi y salud: abordajes terapéuticos Magical attachment: Children in magical relations with hospital clowns Clown Doctors as a Treatment for Preoperative Anxiety in Children: A Randomized, Prospective Study Humour Sans Frontieres: The Feasibility of Providing Clown Care at a Distance Armfield et al.	"clown-doctors."	
The art of the clown theater in the care of hospitalized children. The Doctors of the Happiness in the pediatric ward: experience of the nursing team. El teatro clown en el entorno sanitario. Clowns: a possible reflection for the Gestalt-therapy. Doctors of Ethics of happiness Masetti Doctors of Grace: The child speaks El humor como estrategia terapéutica en niños hospitalizados en unidades pediatricas en Pereira (Colombia) - Reporte de una experiência Humor in the "Twilight Zone" - My Work as a Medical Clown with Patients with Dementia More than just clowns - Clown Doctor rounds and their impact for children, families and staff The effect of a Medical Clown on Pain During Intravenous Ac-cess in the Pediatric Emergency Department: A randomized Prospective Pilot Study Clowning as a supportive measure in paediatrics - a survey of clowns, parents and nursing staff Clowns Benefit Children Hospitalized for Respiratory Pathologies Parental anxiety and stress before pediatric anesthesia: A pilot study on the effectiveness of preoperative clown intervention Physiological and Emotional Responses of Disabled Children to Therapeutic Clowns: A Pilot Study Therapeutic clowning in paediatric practice Joyful and serious intentions in the work of hospital clowns: A meta-analysis based on a 7-year research project conducted in three parts The Life Threatened Child and the Life Enhancing Clown: Towards a Model of Therapeutic Clowning Lo esencial es invisible a los ojos: payasos que humanizan y promueven salud Espinosa e Gutiérrez Raviv Vagnoli et al. Espinosa e Gutiérrez García et al. Magical attachment: Children in magical relations with hospital clowns Linge Clown Doctors as a Treatment for Preoperative Anxiety in Children: A Randomized, Prospective Study	Happiness for the Health: The art of clowning as proposal of social technology for the Unique	Campos
El teatro clown en el entorno sanitario. El teatro clown en el entorno sanitario. Clowns: a possible reflection for the Gestalt-therapy. Doctors of Ethics of happiness Doctors of Ethics of happiness Doctors of Grace: The child speaks El humor como estrategia terapéutica en niños hospitalizados en unidades pediatricas en Pereira (Colombia) - Reporte de una experiência Humor in the "Twillight Zone" - My Work as a Medical Clown with Patients with Dementia Humor in the "Twillight Zone" - My Work as a Medical Clown with Patients with Dementia Raviv More than just clowns - Clown Doctor rounds and their impact for children, families and staff The effect of a Medical Clown on Pain During Intravenous Ac-cess in the Pediatric Emergency Department: A randomized Prospective Pilot Study Clowning as a supportive measure in paediatrics - a survey of clowns, parents and nursing staff Barkmann et al. Clowns Benefit Children Hospitalized for Respiratory Pathologies Parental anxiety and stress before pediatric anesthesia: A pilot study on the effectiveness of preoperative clown intervention Physiological and Emotional Responses of Disabled Children to Therapeutic Clowns: A Pilot Study Therapeutic clowning in paediatric practice Joyful and serious intentions in the work of hospital clowns: A meta-analysis based on a 7-year research project conducted in three parts The Life Threatened Child and the Life Enhancing Clown: Towards a Model of Therapeutic Clowning Lo esencial es invisible a los ojos: payasos que humanizan y promueven salud Espinosa e Guttérrez Risa y salud: abordajes terapêuticos Magical attachment: Children in magical relations with hospital clowns Clown Doctors as a Treatment for Preoperative Anxiety in Children: A Randomized, Prospective Study Humour Sans Frontieres: The Feasibility of Providing Clown Care at a Distance Armfield et al.	system of Health.	
El teatro clown en el entorno sanitario. Clowns: a possible reflection for the Gestalt-therapy. Tsallis Doctors of Ethics of happiness Masetti Doctors of Grace: The child speaks El humor como estrategia terapéutica en niños hospitalizados en unidades pediatricas en Pereira (Colombia) - Reporte de una experiência Humor in the "Twilight Zone" - My Work as a Medical Clown with Patients with Dementia Raviv More than just clowns - Clown Doctor rounds and their impact for children, families and staff The effect of a Medical Clown on Pain During Intravenous Ac-cess in the Pediatric Emergency Department: A randomized Prospective Pilot Study Clowning as a supportive measure in paediatrics - a survey of clowns, parents and nursing staff Clowns Benefit Children Hospitalized for Respiratory Pathologies Parental anxiety and stress before pediatric anesthesia: A pilot study on the effectiveness of preoperative clown intervention Physiological and Emotional Responses of Disabled Children to Therapeutic Clowns: A Pilot Study Therapeutic clowning in paediatric practice Joyful and serious intentions in the work of hospital clowns: A meta-analysis based on a 7-year research project conducted in three parts The Life Threatened Child and the Life Enhancing Clown: Towards a Model of Therapeutic Clowning Lo esencial es invisible a los ojos: payasos que humanizan y promueven salud Espinosa e Gutiérrez Risa y salud: abordajes terapêuticos Magical attachment: Children in magical relations with hospital clowns Clown Doctors as a Treatment for Preoperative Anxiety in Children: A Randomized, Prospective Study Humour Sans Frontieres: The Feasibility of Providing Clown Care at a Distance Armfield et al.	The art of the clown theater in the care of hospitalized children.	Lima et al.
Clowns: a possible reflection for the Gestalt-therapy. Doctors of Ethics of happiness Doctors of Grace: The child speaks El humor como estrategia terapéutica en niños hospitalizados en unidades pediatricas en Pereira (Colombia) - Reporte de una experiência Humor in the "Twilight Zone" - My Work as a Medical Clown with Patients with Dementia Raviv More than just clowns - Clown Doctor rounds and their impact for children, families and staff The effect of a Medical Clown on Pain During Intravenous Ac-cess in the Pediatric Emergency Department: A randomized Prospective Pilot Study Clowning as a supportive measure in paediatrics - a survey of clowns, parents and nursing staff Clowns Benefit Children Hospitalized for Respiratory Pathologies Parental anxiety and stress before pediatric anesthesia: A pilot study on the effectiveness of preoperative clown intervention Physiological and Emotional Responses of Disabled Children to Therapeutic Clowns: A Pilot Study Therapeutic clowning in paediatric practice Joyful and serious intentions in the work of hospital clowns: A meta-analysis based on a 7-year research project conducted in three parts The Life Threatened Child and the Life Enhancing Clown: Towards a Model of Therapeutic Clowning Lo esencial es invisible a los ojos: payasos que humanizan y promueven salud Espinosa e Gutiérrez Risa y salud: abordajes terapêuticos Magical attachment: Children in magical relations with hospital clowns Clown Doctors as a Treatment for Preoperative Anxiety in Children: A Randomized, Prospective Study Humour Sans Frontieres: The Feasibility of Providing Clown Care at a Distance Armfield et al.	The Doctors of the Happiness in the pediatric ward: experience of the nursing team.	Oliveira & Oliveira
Doctors of Ethics of happiness Doctors of Grace: The child speaks El humor como estrategia terapéutica en niños hospitalizados en unidades pediatricas en Pereira (Colombia) - Reporte de una experiência Humor in the "Twilight Zone" - My Work as a Medical Clown with Patients with Dementia Raviv More than just clowns - Clown Doctor rounds and their impact for children, families and staff The effect of a Medical Clown on Pain During Intravenous Ac-cess in the Pediatric Emergency Department: A randomized Prospective Pilot Study Clowning as a supportive measure in paediatrics - a survey of clowns, parents and nursing staff Clowns Benefit Children Hospitalized for Respiratory Pathologies Parental anxiety and stress before pediatric anesthesia: A pilot study on the effectiveness of preoperative clown intervention Physiological and Emotional Responses of Disabled Children to Therapeutic Clowns: A Pilot Study Therapeutic clowning in paediatric practice Joyful and serious intentions in the work of hospital clowns: A meta-analysis based on a 7-year research project conducted in three parts The Life Threatened Child and the Life Enhancing Clown: Towards a Model of Therapeutic Clowning Lo esencial es invisible a los ojos: payasos que humanizan y promueven salud Espinosa e Gutiérrez Risa y salud: abordajes terapêuticos Magical attachment: Children in magical relations with hospital clowns Linge Clown Doctors as a Treatment for Preoperative Anxiety in Children: A Randomized, Prospective Study Humour Sans Frontieres: The Feasibility of Providing Clown Care at a Distance Armfield et al.	El teatro clown en el entorno sanitario.	Palacín
Doctors of Grace: The child speaks El humor como estrategia terapéutica en niños hospitalizados en unidades pediatricas en Pereira (Colombia) - Reporte de una experiência Humor in the "Twilight Zone" - My Work as a Medical Clown with Patients with Dementia Raviv More than just clowns - Clown Doctor rounds and their impact for children, families and staff The effect of a Medical Clown on Pain During Intravenous Ac-cess in the Pediatric Emergency Department: A randomized Prospective Pilot Study Clowning as a supportive measure in paediatrics - a survey of clowns, parents and nursing staff Clowns Benefit Children Hospitalized for Respiratory Pathologies Bertini et al. Agostini et al. Agostini et al. Agostini et al. Physiological and Emotional Responses of Disabled Children to Therapeutic Clowns: A Pilot Study Therapeutic clowning in paediatric practice Joyful and serious intentions in the work of hospital clowns: A meta-analysis based on a 7-year research project conducted in three parts The Life Threatened Child and the Life Enhancing Clown: Towards a Model of Therapeutic Clowning Lo esencial es invisible a los ojos: payasos que humanizan y promueven salud Espinosa e Gutiérrez Risa y salud: abordajes terapêuticos Magical attachment: Children in magical relations with hospital clowns Clown Doctors as a Treatment for Preoperative Anxiety in Children: A Randomized, Prospective Study Humour Sans Frontieres: The Feasibility of Providing Clown Care at a Distance Armfield et al.	Clowns: a possible reflection for the Gestalt-therapy.	Tsallis
El humor como estrategia terapéutica en niños hospitalizados en unidades pediatricas en Pereira (Colombia) - Reporte de una experiência Humor in the "Twilight Zone" - My Work as a Medical Clown with Patients with Dementia Raviv More than just clowns - Clown Doctor rounds and their impact for children, families and staff Ford et. al The effect of a Medical Clown on Pain During Intravenous Ac-cess in the Pediatric Emergency Department: A randomized Prospective Pilot Study Clowning as a supportive measure in paediatrics - a survey of clowns, parents and nursing staff Barkmann et al. Clowns Benefit Children Hospitalized for Respiratory Pathologies Bertini et al. Parental anxiety and stress before pediatric anesthesia: A pilot study on the effectiveness of preoperative clown intervention Physiological and Emotional Responses of Disabled Children to Therapeutic Clowns: A Pilot Kingsnorth et al. Study Therapeutic clowning in paediatric practice Finlay et al. Joyful and serious intentions in the work of hospital clowns: A meta-analysis based on a 7-year research project conducted in three parts The Life Threatened Child and the Life Enhancing Clown: Towards a Model of Therapeutic Clowning Lo esencial es invisible a los ojos: payasos que humanizan y promueven salud Espinosa e Gutiérrez Risa y salud: abordajes terapêuticos García et al. Magical attachment: Children in magical relations with hospital clowns Linge Clown Doctors as a Treatment for Preoperative Anxiety in Children: A Randomized, Prospective Vagnoli et al. Study Humour Sans Frontieres: The Feasibility of Providing Clown Care at a Distance Armfield et al.	Doctors of Ethics of happiness	Masetti
(Colombia) - Reporte de una experiência Humor in the "Twilight Zone" - My Work as a Medical Clown with Patients with Dementia Raviv More than just clowns - Clown Doctor rounds and their impact for children, families and staff The effect of a Medical Clown on Pain During Intravenous Ac-cess in the Pediatric Emergency Department: A randomized Prospective Pilot Study Clowning as a supportive measure in paediatrics - a survey of clowns, parents and nursing staff Clowns Benefit Children Hospitalized for Respiratory Pathologies Bertini et al. Parental anxiety and stress before pediatric anesthesia: A pilot study on the effectiveness of preoperative clown intervention Physiological and Emotional Responses of Disabled Children to Therapeutic Clowns: A Pilot Study Therapeutic clowning in paediatric practice Joyful and serious intentions in the work of hospital clowns: A meta-analysis based on a 7-year research project conducted in three parts The Life Threatened Child and the Life Enhancing Clown: Towards a Model of Therapeutic Clowning Lo esencial es invisible a los ojos: payasos que humanizan y promueven salud Espinosa e Gutiérrez Risa y salud: abordajes terapêuticos Magical attachment: Children in magical relations with hospital clowns Linge Clown Doctors as a Treatment for Preoperative Anxiety in Children: A Randomized, Prospective Study Humour Sans Frontieres: The Feasibility of Providing Clown Care at a Distance Armfield et al.	Doctors of Grace: The child speaks	Aquino et al.
Humor in the "Twilight Zone" - My Work as a Medical Clown with Patients with Dementia Raviv More than just clowns - Clown Doctor rounds and their impact for children, families and staff The effect of a Medical Clown on Pain During Intravenous Ac-cess in the Pediatric Emergency Department: A randomized Prospective Pilot Study Clowning as a supportive measure in paediatrics - a survey of clowns, parents and nursing staff Barkmann et al. Clowns Benefit Children Hospitalized for Respiratory Pathologies Bertini et al. Parental anxiety and stress before pediatric anesthesia: A pilot study on the effectiveness of preoperative clown intervention Physiological and Emotional Responses of Disabled Children to Therapeutic Clowns: A Pilot Study Therapeutic clowning in paediatric practice Joyful and serious intentions in the work of hospital clowns: A meta-analysis based on a 7-year research project conducted in three parts The Life Threatened Child and the Life Enhancing Clown: Towards a Model of Therapeutic Clowning Lo esencial es invisible a los ojos: payasos que humanizan y promueven salud Espinosa e Gutiérrez Risa y salud: abordajes terapêuticos Magical attachment: Children in magical relations with hospital clowns Clown Doctors as a Treatment for Preoperative Anxiety in Children: A Randomized, Prospective Study Humour Sans Frontieres: The Feasibility of Providing Clown Care at a Distance Armfield et al.	El humor como estrategia terapéutica en niños hospitalizados en unidades pediatricas en Pereira	Sánchez et al.
More than just clowns - Clown Doctor rounds and their impact for children, families and staff The effect of a Medical Clown on Pain During Intravenous Ac-cess in the Pediatric Emergency Department: A randomized Prospective Pilot Study Clowning as a supportive measure in paediatrics - a survey of clowns, parents and nursing staff Barkmann et al. Clowns Benefit Children Hospitalized for Respiratory Pathologies Bertini et al. Parental anxiety and stress before pediatric anesthesia: A pilot study on the effectiveness of preoperative clown intervention Physiological and Emotional Responses of Disabled Children to Therapeutic Clowns: A Pilot Study Therapeutic clowning in paediatric practice Joyful and serious intentions in the work of hospital clowns: A meta-analysis based on a 7-year research project conducted in three parts The Life Threatened Child and the Life Enhancing Clown: Towards a Model of Therapeutic Clowning Lo esencial es invisible a los ojos: payasos que humanizan y promueven salud Espinosa e Gutiérrez Risa y salud: abordajes terapêuticos García et al. Magical attachment: Children in magical relations with hospital clowns Clown Doctors as a Treatment for Preoperative Anxiety in Children: A Randomized, Prospective Study Humour Sans Frontieres: The Feasibility of Providing Clown Care at a Distance Armfield et al.	(Colombia) - Reporte de una experiência	
The effect of a Medical Clown on Pain During Intravenous Ac-cess in the Pediatric Emergency Department: A randomized Prospective Pilot Study Clowning as a supportive measure in paediatrics - a survey of clowns, parents and nursing staff Barkmann et al. Clowns Benefit Children Hospitalized for Respiratory Pathologies Bertini et al. Parental anxiety and stress before pediatric anesthesia: A pilot study on the effectiveness of preoperative clown intervention Physiological and Emotional Responses of Disabled Children to Therapeutic Clowns: A Pilot Study Therapeutic clowning in paediatric practice Finlay et al. Joyful and serious intentions in the work of hospital clowns: A meta-analysis based on a 7-year research project conducted in three parts The Life Threatened Child and the Life Enhancing Clown: Towards a Model of Therapeutic Clowning Lo esencial es invisible a los ojos: payasos que humanizan y promueven salud Espinosa e Gutiérrez Risa y salud: abordajes terapêuticos García et al. Magical attachment: Children in magical relations with hospital clowns Clown Doctors as a Treatment for Preoperative Anxiety in Children: A Randomized, Prospective Study Humour Sans Frontieres: The Feasibility of Providing Clown Care at a Distance Armfield et al.	Humor in the "Twilight Zone" - My Work as a Medical Clown with Patients with Dementia	Raviv
Department: A randomized Prospective Pilot Study Clowning as a supportive measure in paediatrics - a survey of clowns, parents and nursing staff Barkmann et al. Clowns Benefit Children Hospitalized for Respiratory Pathologies Parental anxiety and stress before pediatric anesthesia: A pilot study on the effectiveness of preoperative clown intervention Physiological and Emotional Responses of Disabled Children to Therapeutic Clowns: A Pilot Study Therapeutic clowning in paediatric practice Joyful and serious intentions in the work of hospital clowns: A meta-analysis based on a 7-year research project conducted in three parts The Life Threatened Child and the Life Enhancing Clown: Towards a Model of Therapeutic Clowning Lo esencial es invisible a los ojos: payasos que humanizan y promueven salud Espinosa e Gutiérrez Risa y salud: abordajes terapêuticos Magical attachment: Children in magical relations with hospital clowns Clown Doctors as a Treatment for Preoperative Anxiety in Children: A Randomized, Prospective Study Humour Sans Frontieres: The Feasibility of Providing Clown Care at a Distance Armfield et al.	More than just clowns - Clown Doctor rounds and their impact for children, families and staff	Ford et. al
Clowning as a supportive measure in paediatrics - a survey of clowns, parents and nursing staff Clowns Benefit Children Hospitalized for Respiratory Pathologies Parental anxiety and stress before pediatric anesthesia: A pilot study on the effectiveness of preoperative clown intervention Physiological and Emotional Responses of Disabled Children to Therapeutic Clowns: A Pilot Study Therapeutic clowning in paediatric practice Joyful and serious intentions in the work of hospital clowns: A meta-analysis based on a 7-year research project conducted in three parts The Life Threatened Child and the Life Enhancing Clown: Towards a Model of Therapeutic Clowning Lo esencial es invisible a los ojos: payasos que humanizan y promueven salud Espinosa e Gutiérrez Risa y salud: abordajes terapêuticos García et al. Magical attachment: Children in magical relations with hospital clowns Clown Doctors as a Treatment for Preoperative Anxiety in Children: A Randomized, Prospective Study Humour Sans Frontieres: The Feasibility of Providing Clown Care at a Distance Armfield et al.	The effect of a Medical Clown on Pain During Intravenous Ac-cess in the Pediatric Emergency	Wolyniez et al.
Clowns Benefit Children Hospitalized for Respiratory Pathologies Parental anxiety and stress before pediatric anesthesia: A pilot study on the effectiveness of preoperative clown intervention Physiological and Emotional Responses of Disabled Children to Therapeutic Clowns: A Pilot Study Therapeutic clowning in paediatric practice Finlay et al. Joyful and serious intentions in the work of hospital clowns: A meta-analysis based on a 7-year research project conducted in three parts The Life Threatened Child and the Life Enhancing Clown: Towards a Model of Therapeutic Clowning Lo esencial es invisible a los ojos: payasos que humanizan y promueven salud Espinosa e Gutiérrez Risa y salud: abordajes terapêuticos García et al. Magical attachment: Children in magical relations with hospital clowns Clown Doctors as a Treatment for Preoperative Anxiety in Children: A Randomized, Prospective Study Humour Sans Frontieres: The Feasibility of Providing Clown Care at a Distance Agostini et al. Agostini et al. Kingsnorth et al.	Department: A randomized Prospective Pilot Study	
Parental anxiety and stress before pediatric anesthesia: A pilot study on the effectiveness of preoperative clown intervention Physiological and Emotional Responses of Disabled Children to Therapeutic Clowns: A Pilot Study Therapeutic clowning in paediatric practice Joyful and serious intentions in the work of hospital clowns: A meta-analysis based on a 7-year research project conducted in three parts The Life Threatened Child and the Life Enhancing Clown: Towards a Model of Therapeutic Koller e Gryski Clowning Lo esencial es invisible a los ojos: payasos que humanizan y promueven salud Espinosa e Gutiérrez Risa y salud: abordajes terapêuticos García et al. Magical attachment: Children in magical relations with hospital clowns Clown Doctors as a Treatment for Preoperative Anxiety in Children: A Randomized, Prospective Study Humour Sans Frontieres: The Feasibility of Providing Clown Care at a Distance Armfield et al.	Clowning as a supportive measure in paediatrics - a survey of clowns, parents and nursing staff	Barkmann et al.
Physiological and Emotional Responses of Disabled Children to Therapeutic Clowns: A Pilot Study Therapeutic clowning in paediatric practice Joyful and serious intentions in the work of hospital clowns: A meta-analysis based on a 7-year research project conducted in three parts The Life Threatened Child and the Life Enhancing Clown: Towards a Model of Therapeutic Clowning Lo esencial es invisible a los ojos: payasos que humanizan y promueven salud Espinosa e Gutiérrez Risa y salud: abordajes terapêuticos García et al. Magical attachment: Children in magical relations with hospital clowns Clown Doctors as a Treatment for Preoperative Anxiety in Children: A Randomized, Prospective Study Humour Sans Frontieres: The Feasibility of Providing Clown Care at a Distance Armfield et al.	Clowns Benefit Children Hospitalized for Respiratory Pathologies	Bertini et al.
Physiological and Emotional Responses of Disabled Children to Therapeutic Clowns: A Pilot Study Therapeutic clowning in paediatric practice Finlay et al. Joyful and serious intentions in the work of hospital clowns: A meta-analysis based on a 7-year research project conducted in three parts The Life Threatened Child and the Life Enhancing Clown: Towards a Model of Therapeutic Clowning Lo esencial es invisible a los ojos: payasos que humanizan y promueven salud Espinosa e Gutiérrez Risa y salud: abordajes terapêuticos García et al. Magical attachment: Children in magical relations with hospital clowns Clown Doctors as a Treatment for Preoperative Anxiety in Children: A Randomized, Prospective Study Humour Sans Frontieres: The Feasibility of Providing Clown Care at a Distance Armfield et al.	Parental anxiety and stress before pediatric anesthesia: A pilot study on the effectiveness of	Agostini et al.
Therapeutic clowning in paediatric practice Joyful and serious intentions in the work of hospital clowns: A meta-analysis based on a 7-year research project conducted in three parts The Life Threatened Child and the Life Enhancing Clown: Towards a Model of Therapeutic Clowning Lo esencial es invisible a los ojos: payasos que humanizan y promueven salud Espinosa e Gutiérrez Risa y salud: abordajes terapêuticos Magical attachment: Children in magical relations with hospital clowns Clown Doctors as a Treatment for Preoperative Anxiety in Children: A Randomized, Prospective Study Humour Sans Frontieres: The Feasibility of Providing Clown Care at a Distance Armfield et al.	preoperative clown intervention	
Therapeutic clowning in paediatric practice Joyful and serious intentions in the work of hospital clowns: A meta-analysis based on a 7-year research project conducted in three parts The Life Threatened Child and the Life Enhancing Clown: Towards a Model of Therapeutic Clowning Lo esencial es invisible a los ojos: payasos que humanizan y promueven salud Espinosa e Gutiérrez Risa y salud: abordajes terapêuticos García et al. Magical attachment: Children in magical relations with hospital clowns Clown Doctors as a Treatment for Preoperative Anxiety in Children: A Randomized, Prospective Study Humour Sans Frontieres: The Feasibility of Providing Clown Care at a Distance Armfield et al.	Physiological and Emotional Responses of Disabled Children to Therapeutic Clowns: A Pilot	Kingsnorth et al.
Joyful and serious intentions in the work of hospital clowns: A meta-analysis based on a 7-year research project conducted in three parts The Life Threatened Child and the Life Enhancing Clown: Towards a Model of Therapeutic Clowning Lo esencial es invisible a los ojos: payasos que humanizan y promueven salud Espinosa e Gutiérrez Risa y salud: abordajes terapêuticos García et al. Magical attachment: Children in magical relations with hospital clowns Clown Doctors as a Treatment for Preoperative Anxiety in Children: A Randomized, Prospective Study Humour Sans Frontieres: The Feasibility of Providing Clown Care at a Distance Armfield et al.	Study	
research project conducted in three parts The Life Threatened Child and the Life Enhancing Clown: Towards a Model of Therapeutic Clowning Lo esencial es invisible a los ojos: payasos que humanizan y promueven salud Risa y salud: abordajes terapêuticos García et al. Magical attachment: Children in magical relations with hospital clowns Clown Doctors as a Treatment for Preoperative Anxiety in Children: A Randomized, Prospective Study Humour Sans Frontieres: The Feasibility of Providing Clown Care at a Distance Armfield et al.	Therapeutic clowning in paediatric practice	Finlay et al.
The Life Threatened Child and the Life Enhancing Clown: Towards a Model of Therapeutic Clowning Lo esencial es invisible a los ojos: payasos que humanizan y promueven salud Espinosa e Gutiérrez Risa y salud: abordajes terapêuticos García et al. Magical attachment: Children in magical relations with hospital clowns Clown Doctors as a Treatment for Preoperative Anxiety in Children: A Randomized, Prospective Study Humour Sans Frontieres: The Feasibility of Providing Clown Care at a Distance Armfield et al.	Joyful and serious intentions in the work of hospital clowns: A meta-analysis based on a 7-year	Linge
Clowning Lo esencial es invisible a los ojos: payasos que humanizan y promueven salud Risa y salud: abordajes terapêuticos Magical attachment: Children in magical relations with hospital clowns Clown Doctors as a Treatment for Preoperative Anxiety in Children: A Randomized, Prospective Study Humour Sans Frontieres: The Feasibility of Providing Clown Care at a Distance Armfield et al.	research project conducted in three parts	
Lo esencial es invisible a los ojos: payasos que humanizan y promueven salud Risa y salud: abordajes terapêuticos Magical attachment: Children in magical relations with hospital clowns Clown Doctors as a Treatment for Preoperative Anxiety in Children: A Randomized, Prospective Study Humour Sans Frontieres: The Feasibility of Providing Clown Care at a Distance Armfield et al.	The Life Threatened Child and the Life Enhancing Clown: Towards a Model of Therapeutic	Koller e Gryski
Risa y salud: abordajes terapêuticos Magical attachment: Children in magical relations with hospital clowns Clown Doctors as a Treatment for Preoperative Anxiety in Children: A Randomized, Prospective Study Humour Sans Frontieres: The Feasibility of Providing Clown Care at a Distance Armfield et al.	Clowning	
Magical attachment: Children in magical relations with hospital clowns Clown Doctors as a Treatment for Preoperative Anxiety in Children: A Randomized, Prospective Study Humour Sans Frontieres: The Feasibility of Providing Clown Care at a Distance Armfield et al.	Lo esencial es invisible a los ojos: payasos que humanizan y promueven salud	Espinosa e Gutiérrez
Clown Doctors as a Treatment for Preoperative Anxiety in Children: A Randomized, Prospective Study Humour Sans Frontieres: The Feasibility of Providing Clown Care at a Distance Armfield et al.	Risa y salud: abordajes terapêuticos	García et al.
Study Humour Sans Frontieres: The Feasibility of Providing Clown Care at a Distance Armfield et al.	Magical attachment: Children in magical relations with hospital clowns	Linge
Humour Sans Frontieres: The Feasibility of Providing Clown Care at a Distance Armfield et al.	Clown Doctors as a Treatment for Preoperative Anxiety in Children: A Randomized, Prospective	Vagnoli et al.
	Study	
Parental presence, clowns or sedative premedication to treat preoperative anxiety in children: Vagnoli et al.	Humour Sans Frontieres: The Feasibility of Providing Clown Care at a Distance	Armfield et al.
	Parental presence, clowns or sedative premedication to treat preoperative anxiety in children:	Vagnoli et al.

what could be the most promising option?	
. 5.	
Pro-cura - the art of the life: a project for the humanization in Health	Rosevics et al.
The clown's effect in the emotional state and in the pain complaints of hospitalized adults	Mussa e Malerbi
Impact of Psychological Interventions on Reducing Anxiety, Fear and the Need for Sedation in	Viggiano et al.
Children Undergoing Magnetic Resonance Imaging	
Clown intervention to reduce preoperative anxiety in children and parents: a randomized	Dionigi et al.
controlled trial	
Preoperative distraction in children: hand-held videogames vs clown therapy	Messina
Medical clowns facilitate nitrous oxide sedation during intra-articular corticosteroid injection for	Weintraub et al.
juvenile idiopathic arthritis	

Physiologic context

According to the meta-analysis carried out by Lamers et al.2, we can find, in the scientific literature, evidences of the existence of a positive correlation among the emotional, well-being, the recovery and the survival facing a physical illness. In this perspective, the clowns, in general, have as objective the ressignification of the hospital environment with resulting improvment in the emotional wellbeing as much of the patients as of companions and staff 3-8.

It is considered that as much the illness as the internment configure stress generating situations, fear and anxiety, context on which the clowns interventions are based 4,6,9-13. Therefore, we propose a short discussion on the physiology of stress for understanding the effect of obtaining better responses to the patients' and companions treatments, the ones who were in contact with the clowns^{4,6,14,15}.

When an individual is submitted to a stressful event, cortisol and cathecolamine liberation occurs. They provoke the necessary alterations for the body to be capable to react appropriately to the situation responsible for the stress. On the other hand, they can unchain anxiety, appetite loss, increase of allergic reaction and aggravation of conditions as hypertension and diabetes9. Common signs of these reactions to stress are alterations of the pulse, breathing frequency and skin temperature, that in some studies are used as parameters for evaluation of emotional well-being ^{4,6,14}. Like this, interventions that aim to reduce the stress levels provoked by the illness and by the internment, for clinical treatment, surgical procedure, anaesthetic¹³ or sedative¹⁶, can contribute to avoid the onset of complications and associated pathologies, promoting even the patients response to the treatment ^{10,12}.

In general, this mechanism is thought of as the main hypothesis for the patients' best response than they receive the clowns' visit, who act as reducers of the stress associated to the illness and to the internment. It is worthwhile to highlight that the structuring and evaluation of these projects were accomplished starting from depositions and subjective visions of the participants^{3,5,8,9}, so there is still a lack of quantitative scientific evidences that confirm the



physiologic effect behind of the benefits generated by the interventions. This fact allows researches to be accomplished in this sense.

The articles studied do not point out objectively which inherent aspects to the clown's performance are directly associated to reduction of the stress. Among the several possibilities, is considered that this answer is related to the humor^{3,9,17}. According to Freud¹⁸, the pleasure mechanism that arises starting from the humor has origin in the deviation of the suffering, possibility that is done by the human mind through the jaking. This way, the suffering is diminished and becomes laughable,, at the same time as individual is elevated to a superiority status, as it is clear in the following passage: "the humor has something of liberating in its respect, but it also possesses any thing of greatness and elevation"18. In other words, when elevating the individual and confront the possibility of suffering, "the humor it is not resigned, but rebellious" 18.

Artistic context

In different cultures around of the world we can find a comic figure based on the fool's logic, of the maladjusted, that can be associated to the clown¹⁹. However, the clown as we know today in the western cultures has its origin in the European circuses of the century XVIII, where traditionally perfomences of corporal abilities were presented in which the life risk was imminent. The audience of these circus shows was submitted, therefore, to situations capable to produce great tension. With the objective of breaking this tension, in the intervals of the acts, repeated performances and clowning were inserted.

The repeated performances are usually short and comic presentations that satirize the other numbers of the circus¹⁹. This way, the clown in the traditional circus is an individual who is ready to accomplish presentations equivalent to the one of the other circus artists, but it is physically unable to execute them. Like this, the relationship established between the clown and the public does not happen by recognition and equality, but by strangeness, executing like this one of the demands of the comicality and of the laughter, which is, the superiority condition of whom laughs over one or those that are object of the laughter"20 (p. 105).

When inserted in the hospital context, in general, the clown persents him self as a doctor, following the tendency created by Michael Christensen in their first visits, in 1986²¹. With this approach, the clown is disposed to accomplish the medical activities in the same way that traditionally was disposed to carry out the different numbers of the circus. Once again he shows himself maladjusted, subverts the pre-established logic and, the comic situation is created from there on.

To establish himself in the position of the maladjusted it is fundamental for a clown to accept failure and manifestation of their emotions in a sincere and true way²². However, this failure acts on the clown in an unexpected way. In an unusual logic, He is not unmotivated or



strays of his intention of accomplishing a great show or, in the hospital clown's case, of being a great doctor, of promoting a great encounter. This attitude and the feeling associated to the mistake reinforce the clown's comic power and they place the patient in an empowered and trustful position³.

As we said previously, the clown of the traditional circus based great part of his performances on the satire of the circus show. For this reason, it was unnecessary that he had a great number of abilities as riding, juggling, trapeze and acrobatics²⁰. When migrating to the hospital environment, the classic itineraries of the circus give place to a wider surprise, potentiating this capacity of traditional ad-libber. The hospital clown integrates different abilities as interpretation, music, dances, recreation techniques, among others^{9,17}. And, with this, he becomes "a skilled ad-libber with the capacity to answer to the authentic and immediate needs evoked by any patient in any situation"17.

Due to his own characteristics, the clown is a transformer of environments and the hospital environment is no exception. When the mask of the clown enters the scene it brings with itself a world in that the logic can be subverted and, starting from the problem, the possibility of amusement emerges, in what the mistake becomes comic and the maladjustment is common. The clown's mask, therefore, has the power to generate the pleasure of the humor. He is foolish and allows his speaker to be uplifted and enjoy the laughable potential of being unresigned in relation to the hospital environment, independent who this speaker is, of his status or condition²³.

The clowns in the hospital resignify structures, functions, people and objects so that they transform the whole hospital environment, benefitting not only the patients, but all those involved in this condition momentarily or definitively subverted: patient, companion and even the own team of the healthcare^{3,6,23-25}. This breakdown of the traditional environment of the hospital and its ressignification are the base of most of the projects that act with the clown's language in the hospital, and they bring with themselves the humor besides the laughter through the creation of a "world between the real and the imaginary" that allows showing imagination and creativity 23.

As per the contemporary philosopher Gadamer²³, the artistic existence doesn't become exhausted in a moment of pleasure capable to provoke the escape of the lived reality. The art is not detached, but layered upon the lived reality, promoting the experimentation of a cascade of memories, sensations and feelings that, mediated by the cognitive elaboration, they allow another symbolic construction, a renewed interpretation of life.

Target of the interventions

Who benefits from the clown's visit?



Some of the interventions reported in the literature^{9,26} are based on this wide reach of the clown and they include activities that integrate not only the patients of the ward, but nursing teams, doctors and companions. The visits promote: joy^{6,23,27-30}; release of tension^{23,24,26}; improvement of the hospital environment ^{23,28-30}; decrease of the patients' stress and of companions, even when stressful extra-illness factors as financial concerns or family are concerned²⁶; aid in recovery^{10,12,28,29,30}; peacefulness to the mothers in the pediatric patients' case; improvement of the professionals' and students relationship with the pacients^{31, 32} and even of the patients with one another²⁶.

In the interventions focused on the companions, we can observe a phenomenon of reflective reduction of stress and anxiety of the pacient⁶. In other words, a companion with high anxiety levels and stress can unchain these conditions in the patient, so that when the clown acts addressed to the companion, it also reaches, consequently, the patient. This same phenomenon can occur regarding the health team, who when satisfied in the work environment, tends to improve the wellbeing of those whom they attend.

Besides, there are also benefits for the individuals who act as clowns, whether profissional artists 33 or voluntaries26,28,30-32: the use of the mask allows the establishment of unique communicative abilities³², that contribute to the establishment of an integral vision of the individuals within the health service and, sometimes, they serve as relationship model for the team that works in this service^{3,9}.

Although there is no age group predilection for the stress inherent to the hospital enviroment, the clowns' work has been associated mainly to children 10,12,17,27-29,34, reaching only in a secondary way the adults, companions or professionals who work in the hospital^{3,9,25,35}.

In a study carried out by Agostini et al. 6, there are evidences that influence exercised by the clowns' action is sensitive to the age group. In other words, patient of different ages respond in different ways. This study further suggests that younger children's response, in some cases, is smaller due to the immaturity of their cognitive development.

There are moments and situations in that the laughter doesn't change anything, but the humor is essential for the survival in these situations, so much for the patients as for the relatives and profissionais²². The existence of an illnes is a stressful phenomenon by itself and worse in situations of hospital internment, when the individual can be reduced to the condition of patient.

Considering the stress inherent to illness and the internment the potential of the clown's action, there are no evidences that justify the limitation of the interventions to the pediatric age group. Therefore these interventions can be directed to aimed at children, youths, adults³⁴ and seniors, bearing in mind specific needs and the benefits that the humor can bring to all²².

The clowns' relationship with the health professionals team



Health professionals teams acting in hospitals are frequently submitted to long and stressful work days, besides, they have an intense contact with illnes, suffering, anguishes and death, taking on heavy responsibilities. Its evidenced from the reports, that the possibility to participate in the clowns' artistic performance in the hospital environment provides happiness, casualness and relief of the stress not only to the patients, but also to the members of the health team. The professionals can establish a durable relationship with the clowns that a lot of times are seen as a relationship model with the patients 3,32. This relationship that includes clowns, patient, companions and health professionals contributes to changes in the conducts adopted by the care team³⁰ and like this it potentiates the effects of the clowns' performance beyond the moment of the visits.

The clowns' performance also provides for professionals the recognition that certain reactions by the children, such as, apathy, exhaustion, depression and resistance - usually attributed to the illnes - can be linked to the circumstances of the internment and of the relationships within the hospital itself.

It is observed, still, that the relationship between the clowns and the nursing team propitiates motivation and an invitation for intervention²⁹.

Formation and action

Looking and listening as tools in the construction of a relationship

I am what I see of me in your face. I am because you are. Zulu proverb

We mentioned so far that the clown possesses very peculiar abilities of communication that allow him to establish intersubjetive relationships with the patients, mediated by sensorial and affectionate experiences that, starting from the cognitive elaboration, propitiate a renewed interpretation of the reality.

This relationship is built starting from the language. The clown's figure constitutes the expression of the artistic language, because it is through the mask that encounters are estabilished, that breakdown the logic of the relationships in hospital environment, allowing other interpretative possibilities of the surrounding.

This artistic dimension stands out even more when we observe that the clown's comicality resides exactly in his extremely human character. The clown lives the sensations to extreme; when he laughs, cries, has fun and relates to, the clown makes its always in a very intense way. It is for this that in his own essence and, particularly, when he migrates to the hospital, the clown -



through the artistic expression - contemplates what there is of human in each individual's subjectivity.

When inserted in the hospital environment, the person becomes patient (one that receives the action, the passive) and, frequently, the illness in itself. His interactions start to be restricted to the medical team and nursing, in some cases also to his companion. The relationships start to be built with base in paradigms and biomedical procedures that guide the professionals' conduct, creating an encounter in which some aspects of the subjectivity are occult. When receiving the clown, the patient does not see him as member of the medical team¹⁷ and this already allows the configuration of a new encounter type, in which elements of the subjectivity latent in the interned individual usually emerge.

In an improviser condition, starting from the tools given by his speaker, the clown should have a very sharpened perception of the other³³. In other words, the base of the formation and of a hospital clown's action should be this ability to notice and to act with view to the establishment of a relationship that makes possible the appearance of the game and of the intersubjetivity. Starting from this interaction, aspects of the individuality emerge as much of the clown as of his speaker and, by the altered logic of the art of clowning, the intersubjetivity evades that of the daily hospital routine. This way, in contact with the clown, the patient adopts another role.

For this game to established itself in an appropriate way, it is fundamental that the clown be capable to recognize the ephemeral character of the intersubjetivity. Instead of looking for the establishment of the dialogue, flow with the dialogue established starting from the first instant of the encounter, be it verbal or no, to conduct it and let himself be conducted by it. This ability for the dialogue will be established, therefore, starting from looking and listening whole and incessant towards the other. In other words, looking and listening to the speaker, the clown can adequately build with him a relationship that alters as much one as the other and allows that both are affected by the presence of the otherness. This relationship with the otherness then can lead or not to the laughter and its simple establishment breaks the logic of the hospital relationships.

The clown is an multidisciplinary artist

As we said, since his performance in the traditional circus, the clown is characterized by his multiple abilities. With his task of satirizing the other circus numbers, he is frequently the one that knows more the abilities presented in the circus shows. Besides, to establish a close relationship with the audience, the clown needs to have a great improvisation ability to play with the information that come from of the spectators during their presentations.

When inserted in the hospital environment, the clown takes with himself multiplicity abilities and becomes, then, an ad-libber with a great supply of resources that can be evoked when necessary, starting from situations brought by the patients with whom they are working. Any



resource that the clown possesses can be useful at a given moment when subsidizing the accomplishment of this work. The gags – short sentences, jokes or gestures that do not need a previous understanding to be funny - besides toys for the accomplishment of the scenic game, juggling techniques, magics, music played live and balloon sculpture³³ are the more common resources ²⁷. In some cases, the necessary training for the acquisition of the abilities used in the interventions can take up to three years³⁶.

A work of Lima et al. 29, shows that music accompanied by instruments, gestures and representations stimulate the patients to move. The clown, as ad-libber artist, is capable to count histories according to every specific moment. The use of the fictional and symbolic language can establish a form of appropriate communication to some situations in which logical and rational argument can not be the best approach 17.

The continuity as key for integrality

As explained, one of the main points identified as root of the improvements observed in the patients that were in contact with the clowns is the ressignification of the hospital environment. This phenomenon unleashed by the clowning interactions happens in a period of larger time than proper time of the encounter itself, in other words, the patients antecipate the clowns' visits before the arrive and they carry within themselves memories after the departure.

Therefore, the patients expectations for the clowns' return, can also be appraised as positive attitudes in the internment³⁰ process as they collaborate for the hospital to earn a new meaning. For Masetti³⁷, antecipating the clowns' visits, the patients would be formulating an objective, and patient that maintain a life objective present better indices for their recovery.

In this sense, the telemedicine can contribute with the continuity of the clowns' visits when the distance or the demand for visits becomes a difficulty in the process. Although it sounds impersonal, a study accomplished with 92 children in Australia³⁴, revealed the children's positive feedback when received virtual visits. According to their parents, who also benefitted by the encounters, these are the most awaited moments of the week for the children.

The continuity of the actions, with some periodicity, can then be considered as one of the keys for the success of the clowns visits in the hospitals. After all, besides stimulating anticipation factors and associated memory, the continuity promotes closer relationships, allowing potent elements of intersubjectivity to consolidate and the empowerment becomes more intense and clearer. Together, these factors can contribute to the best recovery of the hospitalized patient's health.

Conclusion



Generally, the visits accomplished by clowns, professional artists or voluntary, have showing positive results so much in the quality of life of the interned patients, as in their response to treatments, in spite of the lack of quantitative evidences that allows to check this improvement, what opens space for future investigations.

The factors that explain this association are not still fully clear, but we know that the clown's performance is extremely flexible and occurs mainly through the establishment of a relationship that reinforces the human character so much of the patient who receives the visit, as of the clown himself, of the patients' companions and of the health team.

The clown, with his many artistic abilities and flexibility, when confronted with complex, dense or unusual situation, is capable to establish another interaction quality, in which human aspects, latent during the internment, are evidenced. The clowning art legitimates the configuration of a game, placed upon the hospital, reality in which the clown - starting from the reactions noticed in the other - suffers too much, laughs too much, is emotionally involved too much and moves quickly among several emotions, but above all has fun and mobilizes in the other elements as humor, fright and enchantment, that take him to rebuild simbolically the moment lived.

From this reflection, we observed that the clown that acts in hospital transforms the artist, the human's expression. He should be capable to look the other in depth, to overcome the stigma of the patient in situation of hospital internment, to use the resources that eventually can have, whether based on the humor or not, to establish intersubjetive interactions potent in generating health.

They are many horizons open to the investigation on the sense and impacts of the clown's activities for the patients and others involved, looking for answers in the physiopathology, the neuroscience, in immunological, endocrine, processes etc. However, for the above exposed, it seems clear also that it is fundamental to give voice the other fields of knowledge, such as the philosophy, anthropology and the aesthetics, that help us especially to find the questions that are worthwhile to ask to understand the wealth and depth of this human experience.

Acknowledgment

We thank Prof. José Ricardo Carvalho Mesquita Ayres for the revision and suggestions in the final revision of this article.

Collaborators

Authors Artur Ramos, Carolina Costa Silva and Gustavo Rosa Gameiro participated, equally, of all stages of elaboration of the article. Camila Morato de Conceição Scatena participated in the bibliographical revision, of the discussions and the composition of the article. Mariana Sato participated in the revision of the text.

References



- 1. Couto M. Um rio chamado Tempo, uma casa chamada Terra. São Paulo: Companhia das Letras; 2003.
- 2. Lamers SM, Bolier L, Westerhof GJ, Smit F, Bohlmeijer ET. The impact of emotional well-being on long-term recovery and survival in physical illness: a meta-analysis. J Behav Med. 2012; 35(5):538-47.
- 3. Ford K, Courtney-Pratt H, Tesch L, Johnson C. More than just clowns clown doctor rounds and their impact for children, families and staff. J Child Health Care. 2013; 18(3):286-96.
- 4. Bertini M, Isola E, Paolone G, Curcio G. Clowns benefit children hospitalized for respiratory pathologies. Evid Based Complement Alternat Med. 2011; 2011:879125.
- 5. Barkmann C, Siem AK, Wessolowski N, Schulte-Markwort M. Clowning as a supportive measure in paediatrics - a survey of clowns, parents and nursing staff. [Internet] BMC Pediatr. 2013; [aceso 2015 Set 14] 13:166. Disponível em: http://www.biomedcentral.com/1471-2431/13/166
- 6. Agostini F, Monti F, Neri E, Dellabartola S, de Pascalis L, Bozicevic L. Parental anxiety and stress before pediatric anesthesia: a pilot study on the effectiveness of preoperative clown intervention. J Health Psychol. 2014; 19(5):587-601.
- 7. Kingsnorth S, Blain S, McKeever P. Physiological and emotional responses of disabled children to therapeutic clowns: a pilot study. Evid Based Complement Alternat Med. 2011; 2011:732394.
- 8. Linge L. Magical attachment: children in magical relations with hospital clowns. [Internet] Int J Qual Stud Health Well-being. 2012; 7:10.3402/qhw.v7i0.11862. Published online 2012 Feb 24. [citado 2015 Set 14] Disponível em: http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3286793/pdf/QHW-7-11862.pdf
- 9. Sánchez Naranjo JC, Gutiérrez Segura JC, Santacruz Ibarra JJ, Romero Leguizamón CR, Ospina Ríos JP. El humor como estrategia terapéutica en niños hospitalizados en unidades pediátricas en Pereira (Colombia): reporte de una experiencia. Rev Colomb Psiquiatr. 2009; 38(1):99-113.
- 10. Vagnoli L, Caprilli S, Messeri A. Parental presence, clowns or sedative premedication to treat preoperative anxiety in children: what could be the most promising option? Paediatr Anaesth. 2010; 20(10):937-43.
- 11. Viggiano MP, Giganti F, Rossi A, Di Feo D, Vagnoli L, Calcagno G, et al. Impact of psychological interventions on reducing anxiety, fear and the need for sedation in children undergoing magnetic resonance imaging. Pediatr Reports. 2015; 7(1):5682. doi:10.4081/ pr.2015.5682
- 12. Dionigi A, Sangiorgi D, Flangini R. Clown intervention to reduce preoperative anxiety in children and parents: a randomized controlled trial. J Health Psychol. 2014; 19(3):369-80. PubMed PMID: 23362335.
- 13. Messina M, Molinaro F, Meucci D, Angotti R, Giuntini L, Cerchia E, et al. Preoperative distraction in children: hand-held videogames vs clown therapy. Pediatr Med Chir. 2014; 36(5-6):98. PubMed PMID: 25669889. Sato M, Ramos A, Silva CC, Gameiro GR, Scatena CMC artigo COMUNICAÇÃO SAÚDE EDUCAÇÃO 2016; 20(56):123-34 123



- 14. Kingsnorth S, Blain S, McKeever P. Physiological and emotional responses of disabled children to therapeutic clowns: a pilot study. Evid Based Complement Alternat Med. 2011; 2011:732394.
- 15. Lancheros García EA, Tovar Valle JF, Rojas Bermúdez CA. Risa y salud: abordajes terapéuticos: [revisión]. [Internet] MedUNAB. 2011 [acesso 2015 Set 14]; 14(1). Disponível em: http://revistas.unab.edu.co/index.php?journal=medunab&page=article& op=view&path%5B%5D=1380&path%5B%5D=1352
- 16. Weintraub Y, Rabinowicz N, Hanuka P, Rothschild M, Kotzki S, Uziel Y. Medical clowns facilitate nitrous oxide sedation during intra-articular corticosteroid injection for juvenile idiopathic arthritis. Isr Med Assoc J. 2014;16(12):771-3. PubMed PMID: 25630207.
- 17. Raviv A. Humor in the "Twilight Zone": my work as a medical clown with patients with dementia. J Holist Nurs. 2013 4; 32(3):226-31.
- 18. Freud S. Der humor almanach 1927 [Internet] [cited 2014 Nov 4]. Available from: http://www.freudonline.com.br/livros/volume-21/vol-xxi-4-o-humor-1927/
- 19. Espinosa BB, Gutiérrez TR. Lo esencial es invisible a los ojos: payasos que humanizan y promueven salud. Aletheia [Internet]. 2010 [acesso 2015 Set 14]; (31):4-15. Disponível em: http://pepsic.bvsalud.org/scielo.php?script=sci arttext&pid=S1413-03942010000100002&lng=pt
- 20. Bolognesi MF. Palhaços. São Paulo: Ed Unesp; 2003.
- 21. Doutores da alegria: música e pirueta nas enfermarias infantis. Dialogo Med. 1997; 12(1):10-2.
- 22. Camuñas Palacín A. El teatro clown en el entorno sanitario. Index Enferm. 2009; 18(1):63-5.
- 23. Linge L. Joyful and serious intentions in the work of hospital clowns: a meta-analysis based on a 7-year research project conducted in three parts [Internet]. Int J Qual Stud Health Well-being. 2013 [acesso 2015 Set 14]; 8:10.3402/ghw.v8i0.18907. Disponível em:
- http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3538281/pdf/QHW-8-18907.pdf
- 24. Gadamer HG. Verdade e método: traços fundamentais de uma hermenêutica filosófica. Petrópolis: Vozes; 2006.
- 25. Finlay F, Baverstock A, Lenton S. Therapeutic clowning in paediatric practice. Clin Child Psychol Psychiatry. 2013; 19(4):596-605.
- 26. Mussa C, Malerbi FEK. O efeito do palhaço no estado emocional e nas queixas de dor de adultos hospitalizados. Psicol Rev. 2012; 21(1):77-97.
- 27. Aquino RG, Bortolucci RZ, Marta IER. Clowns doctors: the child talk... [Internet] Online Braz J Nurs. 2004 [acesso 2015 set 14]; 3(2). Available from: www.uff.br/nepae/objn302aquinoetal.htm



- 28. Araújo TCCF, Guimarães TB. Interações entre voluntários e usuários em oncohematologia pediátrica: um estudo sobre os "palhaços-doutores". Estud Pesqui Psicol. 2009; 9(3):632-47.
- 29. Lima RAG, Azevedo EF, Nascimento LC, Rocha SMM. A arte do teatro Clown no cuidado às crianças hospitalizadas. Rev Esc Enferm USP. 2009; 43(1):186-93.
- 30. Oliveira RR, Oliveira ICS. Os Doutores da Alegria na unidade de internação pediátrica: experiências de equipe de enfermagem. Esc Anna Nery Rev Enferm. 2008; 12(2):230-6.
- 31. Mota GM, Mota DMC, Machado MMT, Arrais RH, Oliveira CPV, Salgado MS, et al. A percepção dos estudantes de graduação sobre a atuação do "Doutor Palhaço" em um Hospital Universitário. Rev Bras Promoç Saude. 2012; 25 Supl 2:25-32.
- 32. Rosevics L, Aguiar DA, Borges CR, Hasegawa Filho R, Yamashita TS, Manchak AC, et al. ProCura a arte da vida: um projeto pela humanização na saúde. Rev Bras Educ Med. 2014; 38(4):486-92.
- 33. Masetti M. Doutores da ética da alegria. Interface (Botucatu). 2005; 9(17):453-8.
- 34. Armfield NR, Bradford N, White MM, Spitzer P, Smith AC. Humour sans frontieres: the feasibility of providing clown care at a distance. Telemed J E Health. 2011; 17(4):316-8.
- 35. Wolyniez I, Rimon A, Scolnik D, Gruber A, Tavor O, Haviv E, et al. The effect of a medical clown on pain during intravenous access in the pediatric emergency department: a randomized prospective pilot study. Clin Pediatr (Phila). 2013; 52(12):1168-72.
- 36. Koller D, Gryski C. The life threatened child and the life enhancing clown: towards a model of therapeutic clowning. Evid Based Complement Alternat Med. 2008; 5(1):17-25. 37. Masetti M. Soluções de palhaços: transformações na realidade hospitalar. São Paulo: Palas Athena; 1998.

Translated by Katalin Weiss