

THE COLORS OF THE DISEASE IN PATIENT CHILDREN

Simona Olaru-Poșiar

Lecturer Ph.D. , „Victor Babeș” University of Timișoara

Abstract: When illness occurs in a child's life there are at least six means of expressing it: behavioral, narrative, through writing- the so called 'narrative medicine' or beyond narration, the artistic form of expression whether it is through painting, music or any other artistic self-expression feature, body language- theatrical, that could be assimilated with behavioral changes or means of self-expression and last but not least somatic, physical or the so called 'body-mind related changes'. The article analyses the mother-child relationship when the child is confronted with the disease, as well as how the child reacts when confronted with external stimuli.

Keywords: narrative writing, illness, child psychology, art psychology, empathy

The child is defined by most psychological dictionaries as a young person who is not yet an adult. It is as if you have the seed, it grows, turns into a young entity, but without water-fuel, comfort and nurture, logic will point to its inevitable mortality. We are all destined to be born, to survive and finally to end the cycle of our life with the inevitable death that makes another cycle reappear. It might sound macabre but it is life inevitably with a beginning, a journey that should enrich our soul not with matter, nor intelligence, but with what we humans call experience or moreover wisdom and finally the road ends so that another journey could begin.

But when the journey takes place, like in a novel, it should be written or else sharing the experience with oneself is painful and nonetheless cannot carry a *lesson* for others to learn. When illness occurs in a child's life there are at least six means of expressing it: behavioral, narrative, through writing- the so called narrative medicine, or beyond narration, the artistic form of expression whether it is through painting, music or any other artistic self-expression feature, body language- theatrical that could be assimilated with behavioral changes or means of self-expression and last but not least somatic, physical or the so called body-mind related changes.

All the most important lessons that I have learned in my life, as a person first of all, then in my profession, as a clinical psychologist and a philologist, fade away in front of the ones I'm learning each day as a mother of two. However, although the laughs are the most beautiful presents that God could send me each day, there are moments when my children faced illness and at that moment I literally can say I felt my soul hurt. From the simple shots as babies, to the moments of more severe illnesses, we faced it all together but nonetheless children act differently in the face of a sickness, a disease, or an illness. For them it aches, whether it is a pinch of a needle, whether they have to see a doctor that most of the time is not empathically involved at all. The child fears the doctor, the illness, because the fear of the unknown, of a new experience is terrible.

The white robes come in like in an experiment and start with explanations the adult cannot comprehend, in a hospital with a smell and whose colors get printed in the child's subconscious forever. The child grows into an adult and years later, accompanies his child to face the same fears, only to realize that fear that is instinctual and no one can explain, is actually a progression of a series of incompetent dialogue between a physician and a patient who moreover is a newcomer in this world governed by all possible laws of insecurity and fears.

The child feels, more like the adult, because his ancestral senses have not yet been put to sleep by environmental factors, feels his mother's heart beat, her pulse, her cries for help and although she assures her child that nothing will come to hurt his integrity, his body, he is able to

detect with mechanisms outside our logic, all her fears, her questions and he answers all her deepest thoughts with only one beat of the heart.

The mother and the child are entities that cannot be separated. She carries her infant for nine months inside her, hears and feels the child from the inside and then feels the birth, painful or not, the bond cannot be diluted when the child steps into the world outside. There are different types of mothers, but for the majority, motherhood –the feeling a woman is generally endowed with, cannot be logically analyzed, it is a primary sense, of caring after your youngster, of each youngster born if siblings should exist. For each child feelings are different, but nonetheless, the care and comfort one feels she should give to a child exist. Fathers care as much as most mothers and the bond must not be questioned, but is built more with the help of environmental factors, not just DNA ones.

In conclusion, children are dependent of their parents and in case of illness no matter of its severity need to be comforted by parents that everything will be alright, that family will be there for them and that the white robe won't hurt them or take them away. The FEAR of being hurt, of losing one's integrity comes from the ancestral fear of death, of ending the cycle of life sooner than it is expected and normal to end, sooner than predicted. We are planned to function with no interruption, but when illness occurs, fear and confusion take us to the panic room rather than to the emergency room. There, without communication, without fellowship and a proper dialogue with everything being explained from the beginning so that parents and children can understand what is happening properly, mixed emotions are painted on the canvas of illness and these emotions might even come to affect the progression of the illness itself.

When my young son was ill, his brother got sick. He was accusing severe pain in his abdominal region. He was so scared that he faced his fears and asked us to take him to the emergency room. Physically he was alright. It was until the second day, when another mother, more experienced than me, asked me whether there was a connection between their illnesses. When I thought it all better, I went home and had a conversation with my son, reassuring him that his brother will be alright. Although sibling competition among boys is a well known fact and especially for the parents' attention and love, this was a case when one sibling was falling ill for the sake of the other. When the latter was reassured of our love and of the fact that we understand his feelings, his symptoms disappeared completely. His bond with his brother began to be stronger. He began to have long conversations alone with the little one, looking for his presence although it ached him to know the other one was not feeling good, he was not fearing the fear, but accepted the feeling as part of existence.

It is easy to dismiss the role that feelings and emotions play in a child's reality, or a child's canvas. At a young age he or she expresses feelings, sores, aches physical or emotional easily by shouting, disagreeing, hitting- a very direct and instinct related approach. As the approved society rules hit the child's universe, he tries to hide and expresses in a strong bond to his personality and because each child is unique we need a dictionary as parents, and then we as parents should help the environment and its actors to understand the little patient. It is said that it takes a village to grow a child, but if the village lacks parental skills, how can it understand the child and what he faces? Can the village learn empathy or basic communication skills?

“Narrative medicine is not a parochial act, and it does not require that the physician and the patient belong to the same identity community. What it does require is that the patient and the physician or the nurse or the social worker feel that they are part of a fellowship, but not of belief or race or ethnicity. It is a fellowship of mortality. All of us are going to die. All of us, as humans, live within time, and that is what the humanities can bring to this process of taking care of people as they move toward their end, not to be macabre. I am not macabre. But I think all of us, to the best of our ability, must try to remember that this is temporary. We doctors are not unlike the person in our examining room, the person in the operating room.”¹

¹ Rita Charon , Interview in the *Humanities*, Fall 18, Issue 4

Although endowed with cognitive intelligence, we humans seem to lack empathy or the ability to express ourselves verbally. Therefore in Finland, doctors at a hospital took upon themselves a daring experiment. They brought a painter in their environment, that could express what children and parents were feeling when being hospitalized. This is called visual therapy and is a very progressive healing method in hospitals worldwide. The result was that the painter could not express clearly what patients wanted because we are each different individuals- therefore patients and doctors were encouraged to paint their feelings. But how can you paint when you cannot speak?

It is easier to paint than to speak. Colors vividly depict what we feel. We feel pain, we give it a color. We feel rejection we attribute it to a color. Fear has its own color for each one of us differently. But like the game of tarot, who will decipher its language.

The Lüscher color test is a psychological test invented by Dr. Max Lüscher in Basel, Switzerland. Max Lüscher believed that sensory perception of color is objective and universally shared by all, but that color preferences are subjective, and that this distinction allows subjective states to be objectively measured by using test colors. Lüscher believed that because the color selections are guided in an unconscious manner, they reveal the person as they really are, not as they perceive themselves or would like to be perceived.

Lüscher believed that personality traits could be identified based on one's choice of color². Therefore, subjects who select identical color combinations have similar personalities. In order to measure this, he conducted a test in which subjects were shown 8 different colored cards and asked to place them in order of preference. Colors are divided between "basic" (blue, yellow, red, green) and "auxiliary" (violet, brown, grey, and black).

| Colors | Meanings |
|--------|---|
| Blue | "Depth of Feeling" passive, concentric, tranquility, calm, tenderness |
| Green | "Elasticity of Will" passive, concentric, defensive, persistence, self-esteem/assertion, pride, control |
| Red | "Force of Will" ex-centric, active aggressive, competitive, action, desire, excitement, sexuality |
| Yellow | "Spontaneity" ex-centric, active, projective, aspiring, expectancy, exhilaration |
| Violet | "Identification" unrealistic/ wishful fulfillment, charm, enchantment |
| Brown | Bodily senses, indicates the body's condition |
| Black | Nothingness, renunciation, surrender or relinquishment |

² www.wikipedia.com accessed [6.11.2018]

| | |
|------|---------------------------------|
| Grey | Non-involvement and concealment |
|------|---------------------------------|

After subjects placed the cards in order from most liked to least liked, they were asked to evaluate the extent to which their personalities matched the descriptive statements formed by Lüscher of each color.

The results of the Lüscher-Color-Diagnostic contain indications pertaining to personal assessment and special, professional recommendations as to how psychological stress and the resulting physical symptoms can be avoided. It also offers additional information for verbal and homeopathic therapy.



For the sick, ill child, communicating—with the doctor or with friends and family desperate to help —becomes its own comfort. So, perhaps, does enscripting some document of the body's illnesses, painting one's emotions on a piece of canvas, urging all emotions to get out like a cascade, an abundance of mixed feelings; a kind of permanence of experience when so much else seems to be resistant to meaning or treatment.

A related study observed the differences in color preferences of school-aged children in varying stages of health, performed by Fleming J.W., Holmes S, Barton L.

The purpose of the study was to determine the preferences in color of children ages 7-12 who were physically well and those in varying states of ill health. Data were collected on a convenience sample of 72 subjects. Children were asked to name their favorite color, and then select the color they preferred from a set of color squares and the picture they preferred from two sets of colored pictures. General information about the child's diagnosis, number of days hospitalized, and number of siblings was also obtained along with other projective information. Data were analyzed using chi-square to test the hypotheses. Logistic regression models were used to examine the independent variables sex, age group, and health state in a multivariate manner by fitting the models with the choices of red, blue, or green as the first or second color on the Lüscher Color Test as the dependent variable. This analysis was repeated with the Picture Test as the dependent variable. The only regressor for these models that was significant was health state. Significant differences were found (p less than 0.05 level) in color preferences of physically well children and those who were ill; in acutely ill and chronically ill children; in physically disabled and acutely ill children; and in children ages 7-9 and 10-12.

Another study, performed at Northwestern University, called "Music and the Brain," was centered on the ways sound processing in the brain is a reflection of brain health. How our brains respond to sound reveals each person's unique narrative of their life experiences. Some of the questions to be considered: How do our experiences, such as learning how to play music and playing sports, affect our brain? Although we are surrounded by sound all of the time, we rarely give much thought to this invisible yet powerful companion. "We have discovered a way to objectively capture the imprint that sounds leave on our brains," says

³ www.wikipedia.com accessed [6.11.2018]

Dr. Kraus, the study coordinator. "This biological approach empowers us to learn more about this invisible ally and enemy of brain health." Dr. Kraus will examine the promise of measuring soundprints in the brain to assess and manage sports-related concussions. She discusses how music training is beneficial for the brain, strengthens our communication skills, and can inform healthcare, education and social policy.

Nina Kraus is a scientist, inventor and amateur musician who uses hearing as a window into brain health. She began her career measuring responses from single auditory neurons and was one of the first to show that the adult nervous system has the potential for reorganization following learning; these insights in basic biology galvanized her to investigate soundprocessing. Her research has found that our lives in sound, and our experiences—for better (musicians, bilinguals) and for worse (aging, language disorders)—shape how our brain makes sense of the sounds we hear⁴.

That the arts and sciences are seen as two contrasting disciplines, and indeed are defined as such, immediately presents challenges to a discussion of art in medicine, one of the foremost branches of science. There has, nevertheless, always been an awareness of the 'art of medicine' and a realization that health is influenced by a wide range of factors, many of which fall outside the conventional boundaries of medical science. As Kirsty Schirmer, Policy Officer of the Royal Society for the Promotion of Health, argues, 'broader determinants impact on health and ... often art acknowledges these determinants where science cannot'.¹ There is moreover increasing evidence that the display of visual art, especially images of nature, can have positive effects on health outcomes, including shorter length of stay in hospital, increased pain tolerance and decreased anxiety.

The idea that art may have potential positive benefits in healthcare is not new and has been recognized by artists and healthcare professionals alike. The quotation 'Art washes away from the soul the dust of everyday life' is usually attributed to Picasso. In 1859 Florence Nightingale recognized the importance of art in medicine and raised issues that are still highly relevant today. In *Notes on Nursing* she wrote 'The effect of beautiful objects, of variety of objects and especially brilliance of colour is hardly at all appreciated ... Little as we know about the way in which we are affected by form, by colour and light, we do know this, that they have an actual physical effect. Variety of form and brilliancy of colour in the objects presented to patients are actual means of recovery.' Hamish McDonald, an artist and cancer patient at the Beatson Hospital in Glasgow, offered a more contemporary view when he wrote 'I am a firm believer in the power that art has to inspire and help alleviate suffering and that it can play a key role in lessening the burden that illness brings'. A display of his observations of life as a cancer patient hang in the atrium of the new Medical School Building in Glasgow.

Perhaps the best known scientific study of the visual environment and health outcomes is a retrospective analysis in which 23 patients recovering from cholecystectomies in rooms with windows on to natural settings rather than brick walls had shorter postoperative hospital stays, had fewer negative evaluative comments from nurses, took fewer moderate and strong analgesic doses and had slightly lower scores for minor postsurgical complications. In a randomized, controlled, cross-over trial of healthy volunteers, Tse *et al.* demonstrated an increased pain threshold and pain tolerance when participants were exposed to soundless video displays of nature as opposed to a blank screen. Visual images, which might be more easily incorporated into healthcare settings than videos or window views have also been studied. Levels of depression and anxiety tended to be lower in patients undergoing chemotherapy who were exposed to visual art than in patients not exposed to visual art. Nature themes were studied by Diette and colleagues in a randomized controlled trial of patients undergoing flexible bronchoscopy. They found that pain control was significantly better in the intervention group than in controls. Ulrich investigated the effects on patients recovering from open heart surgery of exposure to one of the following: an image of nature, an abstract image or no image. Patients exposed to the nature image experienced less postoperative

⁴ to www.brainvolts.northwestern.edu accessed [16.11.18]

anxiety than either of the other two groups. They were also significantly more likely to switch from strong analgesics to weaker painkillers during their recovery. Of note the patients exposed to an abstract image experienced more anxiety than those with no image.

Art in hospitals is generally viewed positively by both patients and staff. A qualitative evaluation of the Exeter Healthcare Arts Project found that the display of visual arts in that hospital was perceived by patients, staff and visitors to have a positive effect on morale. Forty-three percent of frontline clinical staff believed that the arts had a positive effect on healing and 24% considered that the arts improved clinical outcomes. Other studies have assessed the importance of patient choice. A volunteer program in Canada allowed long-term hospital patients to choose from a selection of artworks the one which they would like displayed in their room. Patients reported that the added element of choice improved their mood. There is, moreover, considerable evidence that mental health can be improved by participation in arts projects.

It has been proposed that the beneficial effects of visual art on health are due to positive distraction. Positive distraction is a term used to describe the belief that environmental features can elicit positive feelings, hold attention and interest and, therefore, reduce stressful thoughts. This idea has been developed by Malenbaum and colleagues in a review for the International Association for the Study of Pain. These authors regard a typical treatment setting as one that lacks any positive distraction and argue that environmental stimuli, including visual art, may enhance patient control. Conversely environments that lack positive distractions may cause patients to focus increasingly on their own worries, fears or pain. This can increase the perception of these emotions, and in turn increase levels of stress. There is already a body of literature relating to the deleterious effects of stress on health, and it is suggested that the positive effects of visual art may be due in part to stress reduction.

There is a large body of literature on effects of colours on emotion, and it is possible that the colours used in visual arts are part of the mechanism of benefit. Briefly, colour stimuli may be characterized by hue (wavelength), brightness (illumination) and saturation (vividness); and our emotional responses to these stimuli as pleasurable/non-pleasurable and arousing/not arousing. Colours that elicit high levels of pleasure with low levels of arousal are most likely to induce a state of calm, whereas those causing displeasure and high levels of arousal may provoke anxiety. The short wavelength blues and greens generally elicited more pleasure than the longer wavelength reds and yellows in the comprehensive study by Valdez and Mehrabian, while no consistent patterns were observed between hue and arousal. Brighter and more saturated colours were more pleasant, with brightness contributing more to pleasure than saturation. By contrast, saturation contributed more to arousal than did brightness. Jacobs and Suess investigated the effects of red, yellow, green and blue projected on to a large screen and showed higher state-anxiety scores with red and yellow than with blue and green, though to our knowledge no attempt was made to control for brightness and saturation in that study. A similar study monitoring physiological variables showed greater increases in heart rate and respiratory rate with red and yellow than with blue and green.

Our form is captured in language. A photographer will capture in image, the composer is capturing form in harmony and disharmony and relative meter and so on. But it is the capturing that allows one to see. And when we are trying to see things that are hard to see, for the sick person, communicating—with the doctor or with friends and family desperate to help becomes its own comfort. So, perhaps, does writing down some document of the body's illnesses, a kind of permanence of experience when so much else seems to be resistant to meaning or treatment. In a way, narrative medicine applied on patient- children is dumb listening. It is a listening where you don't know what you are listening for. It is listening for the language, for how it comes out. And then we are able to use the image that the child patient has portrayed or better said described. It is like being a mirror and, yes, humble. And that is how you learn. It is along those lines.

Every word counts. And you had to *mine* the meaning, the implication, the allusion, the beauty out of the language, and pay attention to the figural language, to the temporality, the spatiality, all

of those things that we do as readers. And as you get better at it, you do it all at once. Narrative medicine trains people to listen in a way that every word counts and to pay attention to what figures the patients are using. Where do they start? What is the beginning of this story? And what are we listening *as*? And children always are harder to comprehend and imply more empathy and patience.

We are not listening only as medical practitioners. We are not listening as a psychologist or a psychoanalyst. All of those have frameworks for how to listen. And finally, with great relief, we realize we are listening as a narratologist. We are listening to how the story gets told. At what point do the tears come? At what point does the tempo shift? At what point does the plot change?

BIBLIOGRAPHY

1. Adels G. H., Validation of the Luscher-Color-Test as a screening instrument for emotional disturbance in schoolchildren, Diss. Boston University 1978;
2. Brannen C, Johnson Emberly D, McGrath P. Stress in rural Canada: A structured review of context, stress levels, and sources of stress. *Health Place* 2009;15:219–27
3. Braun, Claude M.J; Bonta, James L (1979). "Cross-Cultural Validity, Reliability, and Stimulus- Characteristics of the Luscher Color Test". *Journal of Personality Assessment*.
4. Cusack P, Lankston L, Isles C. Impact of visual art in patient waiting rooms: survey of patients attending a transplant clinic in Dumfries. *J R Soc Med Sh Rep* 2010
5. Charon, R. , Interview in the *Humanities*, Fall 18, Issue 4
6. Daykin N, Byrne E, Soteriou T, O'Connor S. The impact of art, design and environment in mental healthcare: a systematic review of the literature. *J R Soc Promot Health* 2008;128:85–94
7. Devlin A, Arneill A. Health care environments and patient outcomes. A review of the literature. *Environ Behav* 2003; 35:665–94
8. Diette GB, Lechtzin N, Haponik E, Devrotes A, Rubin HR. Distraction therapy with nature sights and sounds reduces pain during flexible bronchoscopy: a complementary approach to routine analgesia. *Chest*2003;123:941–8
9. Gesler W, Bell M, Curtis S, Hubbard P, Francis S. Therapy by design: evaluating the UK hospital building program. *Health Place* 2004;10:117–28
10. Glendinning M. Ennobling the ordinary? In: Law A, Dominiczak M, Ottar A, Clark T, Masser S, eds. *Space to Heal: Humanity in Healthcare Design*. Edinburgh: Sleeper; 2010
11. Holmes, Cooper B; Buchannan, Jo Ann; Dungan, David S; Reed, Teresa (1986). "The Barnum effect in Luscher color test interpretation". *Journal of Clinical Psychology*
12. Jacobs KW, Suess JF. Effects of four psychological primary colors on anxiety state. *Percept Mot Skills*1975;41:207–10
13. Jacobs KW, Hustmyer FE. Effects of four psychological primary colors on GSR, heart rate and respiration rate. *Percept Mot Skills* 1974;38:763–6
14. Malenbaum S, Williams AC, Ulrich R, Somers TJ. Pain in its environmental context: implications for designing environments to enhance pain control. *Pain* 2008;134:241–4
15. Murarasu D. Cosma M., The Psycho-social Relationships evaluated by Lüscher-Color-Test applied in subjects having predominant neuropsychical tasks. Institut of Medical Research, University of Medicine and Pharmacy, Iasi, Romania;
16. Nightingale F. *Notes on nursing: what it is and what it is not*. London: Harrison; 1859
17. Picco, Richard D; Dzindolet, Mary T (2016). "Examining the Lüscher Color Test". *Perceptual and Motor Skills*. 79 (3 Pt 2): 1555–8
18. Schutt D., *Perceived Accuracy of Luscher Color Test Interpretation Ratings*. California State University Los Angeles, 1999. 1544 Catalina Ave, Pasadena CA 91104-2406, USA
19. Schirmer K. News. *J Roy Soc Promot Health* 2006;126:99–108

20. Staricoff R, Loppert S. Integrating the arts into healthcare: can we effect clinical outcomes? In: Kirklin D, Richardson R, editors. , eds. *The Healing Environment: Without and Within*. London: RCP; 2003. pp. 63–79
21. Scher P, Senior P. Research and Evaluation of the Exeter health care arts project. *Med Hum*2000;26:71–8
22. Suter E, Baylin D. Choosing art as a complement to healing. *Appl Nurs Res* 2007;20:32–8
23. Staricoff R. *Arts in health: a review of the medical literature*. Manchester: Arts Council England; 2004.
24. Tse MM, Ng JK, Chung JW, Wong TK. The effect of visual stimuli on pain threshold and tolerance. *J Clin Nurs* 2002; 11: 462–9
25. Ulrich RS. Effects of interior design on wellness: theory and recent scientific research. *J Health Care Inter Des* 1991;3:97–109
26. Ulrich RS, Lunden O. Effects of exposure to nature and abstract pictures on patients recovery from heart surgery. *Psychophysiology* 1993: S1: 7
27. Ulrich R. View through a window may influence recovery from surgery. *Science* 1984;224:420–1
28. Valdez P, Mehrabian A. Effects of color on emotions. *J Exp Psychol Gen* 1994;123:394–409
29. Wilson EO. *Biophilia*. Cambridge, MA: Harvard University Press; 1984