

A close-up photograph of a hand drawing a pink star on a surface of blue sand. The sand is decorated with orange and pink lines, creating a complex, abstract pattern. The hand is positioned in the upper right quadrant, with the index finger pointing towards the center of the star. The background is a dark, textured surface, possibly a table or a large piece of paper.

A Holistic Approach to Health Necessitates a Deeper Understanding of Human Development

Dr Natalia Sira

A HOLISTIC APPROACH TO HEALTH NECESSITATES A DEEPER UNDERSTANDING OF HUMAN DEVELOPMENT

Connecting body and mind through the consideration of both the physical and psychological components of health helps determine our reactions and developmental behaviour. Furthermore, the ways in which we achieve our optimal developmental potential manage how well we can adapt and cope with changes in our environment, deal with stresses in life and maintain overall well-being. **Dr Natalia Sira** from East Carolina University is improving patient care by taking a holistic and individualised approach to health outcomes, treatment and rehabilitation, focusing on the role of family relationships, developmental needs and spirituality as important components of coping mechanisms.

Human Development and Health

Human development is a part of the larger, interdisciplinary field of developmental science in which the disciplines of biology, psychology and neuroscience have joined forces with education, medicine, and public health. To describe the vast interdisciplinary study of human constancy and change, development is divided into three broad domains: physical, cognitive and socioemotional in the description of developmental progression throughout the lifespan. This approach seeks to identify and explain the factors that influence the consistencies and changes in people over time, starting with infancy through to childhood, adolescence, emerging adulthood and finally, adulthood.

Physical development (growth and changes in the body and brain), cognitive development (learning, language and thinking) and psychosocial development (emotions and social relationships) are

encompassed to provide an integrated, combined view. Each domain of development is influenced by other domains, creating a holistic and dynamic approach to understanding the living, growing and developing individual.

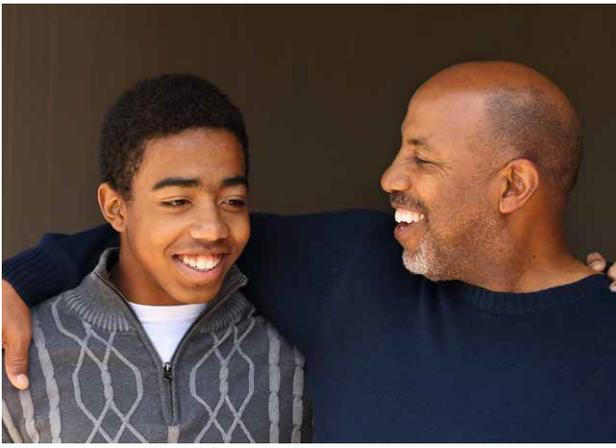
During the first five years of life, a child's brain grows in response to human interactions and emotions laying the foundation for health and future development. In response to the quality of caregiving, brain neurophysiology becomes wired and calibrated, providing the major structure for emotional control and self-regulation, responses to stress, bonding and separation, perceptions of self-worth and care. These are all connected with the survival centre that regulates autonomic functions (breathing, heart, and so on) that sustains life and other brain areas.

The neurophysiological responses to early experiences offer a blueprint for each individual, providing the internal



resources that underlie reactions to stress, quality of bonding, and perceptions of competency, hope and mastery over situations. These psychological resources also play a role in shaping behaviour, adaptation and coping when we face developmental transitions and stressors (such as body change and body weight, media/social pressure) and other stressors in life (including medical conditions and life-threatening illnesses).

To further understand and improve human health outcomes, it is vital to recognise developmental stages as well as age-appropriate challenges and behaviour. Viewing illness as a purely biomedical or physical problem is



insufficient, and without addressing developmental needs, in addition to socioemotional aspects of illness and its impact on the individual, effective patient care, support and prevention are impossible.

In other words, human functioning and health must be viewed holistically. While health triggers and stressors can be genetically or environmentally generated, our reactions to these triggers involve adjustments at both the body and mind (perceptions, emotions, reactions to stress) levels. This means that to be effective in medical methods, we must understand and reach for the internal psychological resources of individuals and include psychological support such as counselling, therapy or/and developmental experts, to help in recovery and to restore balance to our well-being.

Dr Natalia Sira at East Carolina University focuses on understanding human development, behaviour and functioning in a way that comprehensively considers influences on both the body and mind, and the implications of this on overall human health. Her specific areas of research include the role of family environment and early relationships on dieting practices, body satisfaction and self-esteem, coping and stress management. She conducts specific investigations into internal psychological resources, particularly for individuals in difficult circumstances such as those living with cancer or a chronic medical condition.

Body Satisfaction and Healthy Weight

Our body image or satisfaction with our physical appearance is influenced by biological, psychological and sociocultural components. Body satisfaction has been established as an important aspect of self-esteem and mental health, and is closely linked to an individual's perceptions and identity. Discrepancies often exist between an individual's true and ideal body image, which can lead to excessive dieting and other unhealthy behaviours.

Body dissatisfaction and disordered eating are currently viewed as a continuum ranging from eating disorders with related distorted body perception at one end to overeating and obesity

at the other. Regardless of where one falls on this continuum, personal negative self-evaluation leads to body dissatisfaction and is linked to depression, anxiety, and overall, negatively influence the quality of life.

Since completing her doctoral dissertation on body satisfaction and weight, Dr Sira's research throughout the years has expanded upon this topic, with a critical focus on how parental attitudes, especially bonding (formed in early childhood as a blueprint for other reactions), are linked to body perception and satisfaction.

Dr Sira has identified that despite gender-specific associations, higher body satisfaction in males and females is found in those who report a higher degree of care (i.e., secure attachment/bonding) to their parents. Such an attachment is thought to provide a base for children to develop their sense of competency, including adaptation and coping, and contributes to self-esteem and resilience later in life. However, higher maternal control, which is thought to contribute to a child's inability to develop independence, can lead to dieting and is also associated with lower body satisfaction.

Dr Sira proposes that the quality of parent-child attachment relationships is an important factor in body satisfaction due to being linked to self-worth, competency and self-perception. A strong (secure) parent-child relationship is linked to the development of a healthy body perception, whilst insecure attachment and low self-esteem are common in those with eating disorders or body dysmorphism.

Dr Sira has shown that many risk factors for body concerns are linked to the family context, and they must be considered when promoting healthy body perceptions and eating habits. Triggers for eating disorders vary, which means that treatment for individuals must be tailored accordingly. This presents a significant challenge considering that many sufferers believe they do not need help, and their distorted perception of beauty is culturally orientated, deep-rooted and difficult to change.

Stress, Coping and the Role of Spirituality

Early emotional interactions with others and early childhood experiences influence brain development and shape the foundation for future health, reactions to stress and behaviour. Family relationships for each child early in life provide a sense of security that helps them to explore and relate to their environment. Without quality in care and familial structure, a child may not develop a sufficient sense of security or possess the internal psychological resources required to be equipped to feel competent and manage stresses later in life.

In research published in 2014, Dr Sira and her team investigated how the stress and anxiety induced in parents as a result of their child possessing a chronic heart defect can exacerbate negative health outcomes for the child. The entire family

dynamic is modified by how the parents cope with stress. More specifically, children whose parents cope effectively with their child's illness recover at a faster rate and have better health overall. Dr Sira concluded that supporting parents to cope by utilising psychological and social resources, encouraging behavioural strategies that are adapted to the differing needs of both mother and father, and most importantly, maintaining family integration and communication, is critical to aid the coping and recovery of the unwell child.

In more recent research, Dr Sira and her team investigated the coping mechanisms of emerging (aged 19–29) and young adult (aged 30–39) cancer survivors, with a focus on family bonding and spirituality. While coping is a complex skill depending on the psychological internal resources of an individual including self-regulation and competency, age also plays a key role in the ability to cope with multiple stressors. While (emerging) adults are often challenged in coping with developmental tasks in addition to cancer-related stressors, young adults have more life experience in dealing with more than one stressor at a time. Although overcoming the challenges associated with cancer at a young age has shown to contribute to quality of life and resiliency later in life, sadly, only 47% of cancer survivors cope well, accept or adapt to life with cancer. Instead, many fall into depression, self-blame or use dangerous distractions such as substance or alcohol abuse.

Dr Sira found that higher spirituality reliance, higher degrees of parental care or bonding and lower levels of parental control were associated with healthy coping in emerging and young adult cancer survivors. While spirituality is a part of life's philosophy, individuals rely on their spirituality to retrieve feelings of comfort, acceptance and hope, and in this case, reducing the likelihood of unhealthy coping mechanisms. Spirituality was found to represent the strongest contribution to healthy coping among young cancer survivors, yet spirituality as a coping tool remains somewhat unrecognised in the medical field.

Dr Sira argues that encouraging family support at the same time as encouraging independence, rebuilding supportive relationships, and recognising spirituality reliance as a coping tool should be incorporated into the recovery and treatment of young adults with cancer. Specifically, survivorship programmes and peer support groups to connect survivors and share experiences can help young individuals with their identity formation and self-discovery. Dr Sira emphasises that this approach will require a deeper and more sensitive understanding of the complex definition of spirituality, and what the term means to specific individuals. However, such an understanding would facilitate the recovery and rehabilitation of unwell individuals and their families in a way that considers both physical and psychological well-being.

In another study, Dr Sira investigated developmental outcomes of treatment-induced infertility among childhood cancer survivors. About 60% of children suffer from the effects of cancer treatment later in life, with more than 30% subsequently experiencing infertility, which adds further developmental challenges for young male and female cancer survivors. At a time in their lives in which they are forming personal identity through education, establishing intimate relationships, constructing a unique world view and considering parental roles, cancer survivors affected by infertility need to re-evaluate this traditional progression into parental roles and adulthood. Navigating an uncertain future, challenges to intimacy and restructuring identity can leave survivors with a sense of isolation. In this way, the developmental process of self-discovery, while building intimate relationships and family, becomes more complex through the added challenges stemming from infertility. This growing population of young survivors is deserving of care that extends beyond the elimination of disease.

Patient Care Quality

The quality of patient care relies on medical professionals such as nurses, doctors, child life specialists and occupational therapists. Developmental aspects of care should be present not only in paediatrics but also be extended to adolescence and emerging adulthood, for example, to encompass specific age-appropriate requirements incorporating the cognitive and socioemotional needs of the demographic. Dr Sira emphasises the importance of medical professionals considering educational, emotional and sociocultural tasks of the individual in the provision of tailored treatment, in addition to age and assumed maturity.

In research published in 2010 and 2016, Dr Sira found that supporting medical teams themselves will improve the care they give to patients. Secondary traumatisation, such as compassion fatigue, burnout and traumatic stress can affect health care providers, and this can influence their decision-making, empathy levels, behaviour and overall life satisfaction. This also can impact the patients they serve, which highlights why holistic care must be expanded to everyone involved.

Looking to the Future

Dr Sira now hopes to use her findings to support clinical services and advance the training of the young generation of professionals working in the medical field by advocating for developmentally oriented medicine encouraging the connection of body and mind in treatment and recovery/rehabilitation. This important work will pave the way for individually oriented and developmentally sensitive patient care.



Meet the researcher

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Dr Natalia Sira received her medical degree from Uzhhorod State University in Ukraine and worked in oncology for a further 13 years. In 2003, she received her PhD in Human Development from Virginia Polytechnic Institute & State University, USA. She made the move to East Carolina University (also USA) in 2004, where she currently serves as an Associate Professor. Dr Sira's research is focused on understanding human health, and behaviour in a holistic and systemic way that considers the role of both mind and body, utilising both her medical and human development research background. She actively participates in professional societies such as the National Council on Family Relations and the Society for Studying of Emerging Adulthood. Among a multitude of other awards, Dr Sira received an Outstanding Professional Paper Award from the National Council on Family Relations in both 2013 and 2018.

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FURTHER READING

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