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"Children are 30 percent of our people and of hospital patients, but they don't get 30% of health budgets. They can't be treated like small adults," said Prof. Eitan Kerem, director of the pediatrics division at Jerusalem's Hadassah-Hebrew University Medical Centers and co-chair of last week's Gerry Schwartz and Heather Reisman Third International Conference on Pediatric Chronic Diseases, Disability and Human Development at the capital's Ramada Hotel.

"We love children, but [...] they don't vote. There isn't enough government investment and support for children with health problems. An estimated 16% of Israeli children have one or more chronic diseases. Their families need guidance and support so they don't feel alone. They are a weak link in our society, and they constantly struggle for survival," said Kerem.



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Though the severity of chronic illnesses is variable, Kerem continued, there are common challenges confronted by these children and their families. Medical care geared solely toward specific physical conditions is inadequate, as children with chronic conditions require comprehensive rehabilitative services, psychological care and assistance in coping with both social and educational environments that are not set up for the special requirements of a child with a chronic disease.

A child's greatest desire is to be like everyone else, and parents want to see their children leading as normal lives as possible. Unfortunately, chronic disease stands in the way of such aspiration, and these children are often not afforded the chance to experience social interactions even when they are capable of doing so.

Mothers should not be forced to serve as their disabled child's case manager, he said.

"She has no expertise in this. In our center of multidisciplinary, highly trained health professionals, we are a one-stop center for clinical evaluations and monitoring and serve as a national resource center for families. We had 6,000 visits last year," Kerem said.

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### RELIEVING RAGE

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A study published in a recent issue of the journal *Adolescent Psychiatry* was launched after Dr. Jason Kahn and Dr. Joseph Gonzalez-Heydrich noted that children with anger-control problems were often uninterested in psychotherapy but very eager to play video games. The fast-paced "Rage Control" involves shooting at enemy spaceships

while avoiding shooting at friendly ones. As children play, a monitor on one finger tracks their heart rate and displays it on the computer screen. When heart rate goes above a certain level, players lose their ability to shoot at the enemy spaceships. To improve their game, they must learn to keep calm.

"The connections between the brain's executive control centers and emotional centers are weak in people with severe anger problems," explained Gonzalez-Heydrich, chief of psychopharmacology at the pediatric hospital and the chief investigator in the study. "However, to succeed at the game, players have to learn to use these centers at the same time to score points."

The study compared two groups of nine- to 17-year-old children with normal IQs who had not changed their medication during the five-day study period and had been admitted to the hospital's psychiatry inpatient service for high levels of anger. One group of 19 children received standard treatments for anger, including cognitive behavioral therapy, presentation of relaxation techniques and social skills training for five consecutive days. The second group, with 18 children, got these same treatments but spent the last 15 minutes of their session playing the game.

After five sessions, the video gamers were significantly better at keeping their heart rates down. They showed clinically significant decreases in anger scores. The gamers also had a decrease in suppressed, internalized anger that reached marginal statistical significance. In contrast, the group that had undergone standard treatment showed no significant change. The researchers are also developing toys to enhance emotional regulation skills in children too young to play "Rage Control."

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A study published in a recent issue of the journal *Adolescent Psychiatry* was launched after Dr. Jason Kahn and Dr. Joseph Gonzalez-Heydrich noted that children with anger-control problems were often uninterested in psychotherapy but very eager to play video games. The fast-paced "Rage Control" involves shooting at enemy spaceships

while avoiding shooting at friendly ones. As children play, a monitor on one finger tracks their heart rate and displays it on the computer screen. When heart rate goes above a certain level, players lose their ability to shoot at the enemy spaceships. To improve their game, they must learn to keep calm.

"The connections between the brain's executive control centers and emotional centers are weak in people with severe anger problems," explained Gonzalez-Heydrich, chief of psychopharmacology at the pediatric hospital and the chief investigator in the study. "However, to succeed at the game, players have to learn to use these centers at the same time to score points."

The study compared two groups of nine- to 17-year-old children with normal IQs who had not changed their medication during the five-day study period and had been admitted to the hospital's psychiatry inpatient service for high levels of anger. One group of 19 children received standard treatments for anger, including cognitive behavioral therapy, presentation of relaxation techniques and social skills training for five consecutive days. The second group, with 18 children, got these same treatments but spent the last 15 minutes of their session playing the game.

After five sessions, the video gamers were significantly better at keeping their heart rates down. They showed clinically significant decreases in anger scores. The gamers also had a decrease in suppressed, internalized anger that reached marginal statistical significance. In contrast, the group that had undergone standard treatment showed no significant change. The researchers are also developing toys to enhance emotional regulation skills in children too young to play "Rage Control."