# Cognitive and psychological deficits of children undergoing long-term medical treatment in hospitals

Michael B. Ivanov

Reading association of Russia Project «Caring School»

## About the project «Caring School»



## About the project

Dmitry Rogachev Federal Research Center of Pediatric Hematology, Oncology and Immunology (Moscow)

Russian children's clinical hospital (Moscow)

School №109 (Moscow)

**Moscow Education Department** 

Integrated educational environment for children with health problems

Teachers, psychologists, speech therapists.



### Negative effects

Dyslexia, dysphagia, dysarthria

Radiation therapy, chemotherapy and tumor resection are the reason for negative effects of cognitive development

These cognitive deficits are thought to be related to adverse effects on the development of white matter

Impairment of verbal and visuospatial intelligence, verbal fluency and fine motor skills of the dominant hand.



## Learning skills deficits

Deficits in reading and spelling skills, math and exact sciences, foreign languages

Their cognitive conditions characterized by short-term memory, visual memory and working memory deficiency, they also have problems with attention, and information processing speed.



#### **Factors**

- 1) Their physical condition as a result of receiving the prescribed treatment
- 2) Their emotional state characterized by latent anxiety caused by the disease and treatment and the fact that they are in a ward for a long time and miss school and are deprived of communication with peers

  They are in isolation from everyday life.



#### Steps

- 1) Examination by an educational psychologist and a speech therapist
- Period of adaptation is aimed to help an inpatient to overcome difficulties that hamper learning
- 3) Special attention is given to basic literacy skills (reading, writing, counting)

Psychologist and speech therapist work jointly on a single pedagogical task.



## Psychological support

All psychologists obtain a qualification as counsellors and psychotherapists

No matter how a case develops, a child is given psychological support

«A green-pen method» (only a child's success is taken note of)

Goal-oriented behavior -> set goals autonomously

Involving in studies

Working with teachers and responding to their concerns.

f facebook.com/uchimznaem uchimznaem

### Cooperating with teachers

Setting goals

Interacting (analyzing the learning material to understand what is

accessible to a child and what is not at a given stage)

Flexibility (if a condition changes, the plan is updated)

Motivation! Motivation! Motivation!

Homeworking? Its boring! Just play this game!



#### School-leavers

**Examination anxiety** 

Mock examination

Convalescents

**Reintegrating** children in their original educational environment (psychological support).



#### **Parents**

A counsellor provides a consultation or a series of consultations

We watch how parents adapt to the situation

Our main concern here is **prevent induced anxiety** – parents' feeling of worry passed over to a child

After-class activities with their children (switching away from their worries and engaging in creative activities).



#### In conclusion

Combination of psychological, physiological and educational needs of children who have serious illnesses, such as oncology and who have to stay in hospital undergoing long-term treatment

Cooperative work of psychologists, speech therapists and teachers

Psychological adaptation of convalescents

Counselling parents of young long-stay inpatients.



# Thank you for your attention!

Michael Ivanov (Moscow, Russia)

Reading association of Russia The project «Caring School» psychological service head

+7(916)348-23-53 michaelbivanov@gmail.com

