

New Dimensions for Autism

From paper tools to I-Pad.

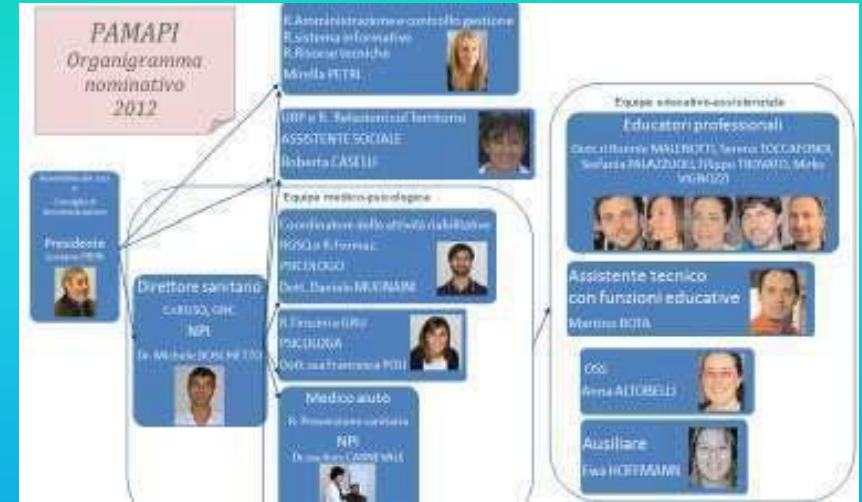
A pilot study about visual and touch-screen supports for low-functioning adults with ASD.



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- 22 patients
- Mean age 35y (range 19-54)
- 18/22 ASD + ID mostly severe
- Non verbal or non functional speech

- communication and interaction deficits are core disorders in Autistic Spectrum Disorders (ASD) and often, mostly in non-verbal low-functioning subjects, behavior becomes the only possible way of communication.
- even challenging behaviors should be treated as non-functional communicative acts.
- clinical and research data sustain the evidence of an inverse relationship between communication skills and challenging behaviors recurrence

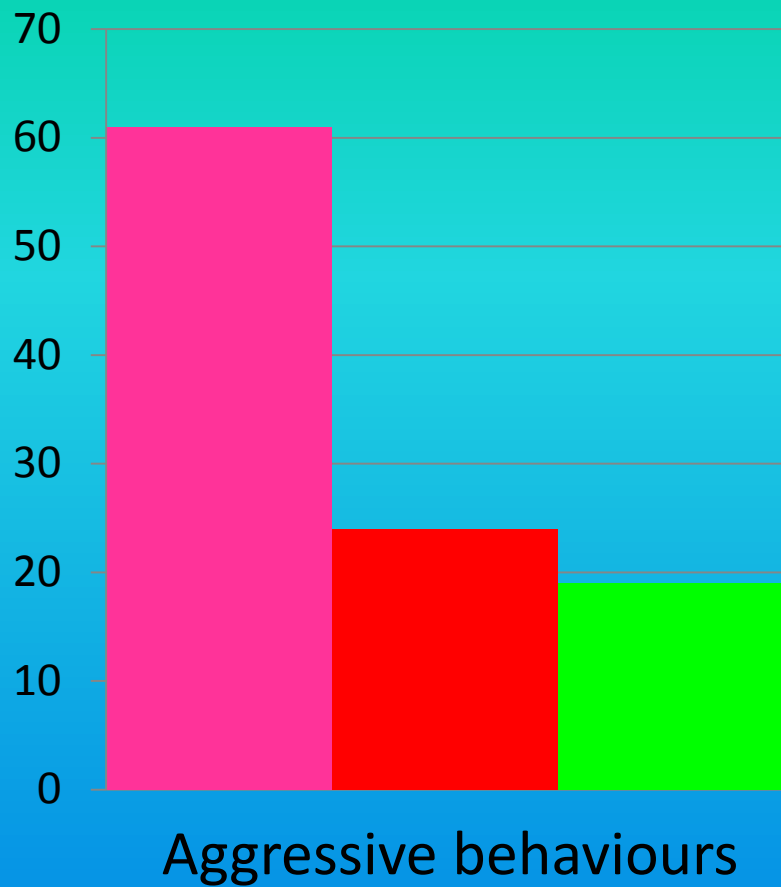
SOME BENEFITS OF VISUAL COMMUNICATION IN ASD

- Verbal language is **invisible** and has an **abstract** and **transient** nature. People with ASD and ID often do not use it to understand the world. Most of their spontaneous language has a **privatistic** character
- Visual cues are **visible**, **concrete** and **permanent**.
- the visual-spatial capacities are a strength for a lot of people with ASD
- a visual presentation of the informations respond to the need for predictability and comprehension as well as of making choices .
- images are an **universal** means of communication

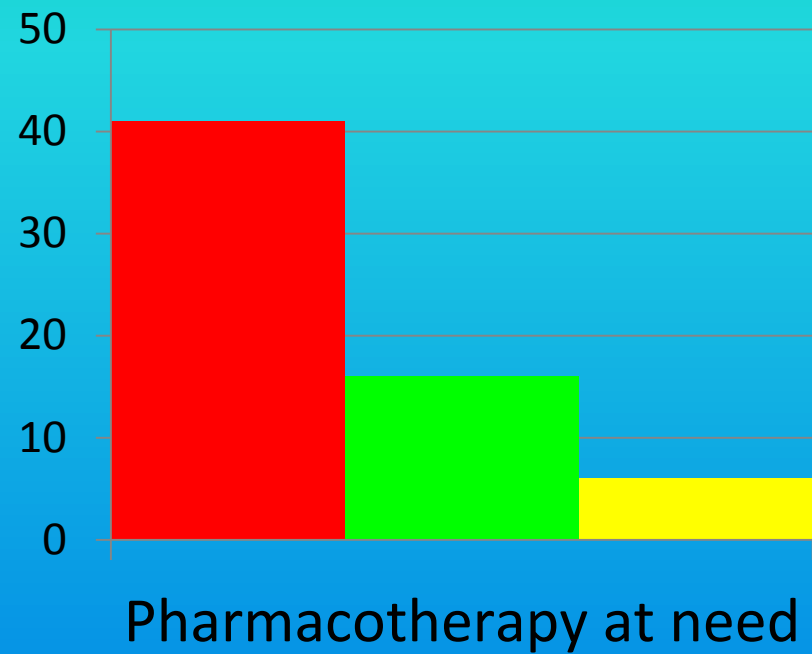
Stage One - March 2011

introduction of visual communication aids:

- Several carefully customized individual interventions with visual supports were utilized, to replace challenging behaviors with more functional communication.
- Then we analyzed the impact of visual aids on the frequency of challenging behaviors after one year and after two years (in the period 1 september-31 december)



- 2010 Sept 1 - Dec 31
- 2011 Sept 1 - Dec 31
- 2012 Sept 1 - Dec 31



- 2011
- 2012
- 2013 (20 sept)



- increase of one operator on the staff
- improved operational consistency in preventing and managing the challenging behavior on the basis of the data coming from the functional analysis
- the rationalization in the basic pharmacotherapy
- continuous improvement of the staff work climate

however, specific case-histories convinced us
that the introduction of visual aids
had an important role
in the decrease of behavioral problems.

Increasing predictability

- Case 1. A significant decrease of previous verbal stereotypy concerning the request of going back home, after the introduction of a visual daily schedule.
- Case 2. Extinction of aggressive behaviors in a patient with a life-long history of recurrent aggressions. From 1998 on every year there were numerous aggressions - 12 episodes in 2010, 8 in 2011 until September, when he started his visual communication intervention: introduction of a daily visual schedule at the center and a weekly visual schedule at home.
- Case 3. Extinction of tantrums following the interruption of a preferred activity (use of the PC) due to the use of a visual timer.

Increasing self-determination

- Case 5. The reduction of tantrums (intensity and length) during activities. This result was due to the use of a visual panel in which he chose the preferred sequence of planned activities.
- Case 6. The reduction of tantrums (frequency and length) in a patient with transition difficulties upon arrival at the center. This result was due to the introduction of a welcome-routine in which he chose his first activity at the center through a visual book.
- Case 7. The reduction of nervousness and the increase of satisfaction, by having the patient choose meal at home and at the restaurant, through a visual book.

Increasing task-compliance

- Case 8. Increase of the global task duration. This result was due to a visual presentation of all the tasks together whereby the subject felt the need to complete the visual sequence

Reminding reinforcement

- Case 4. Enuresis extinction in a patient with an eight-month history of enuresis at the center. This result was due to a visual reinforcement reminder, a strongly preferred food, made available not more than four times after each spontaneous functional urination. No relapse was observed after the interruption of the reminder.

Stage Two - June 2013

From paper tools to I-PAD..

Video

'OUR BEST TEACHER IS OUR CLIENT'

Michael Powers, Yale University, Connecticut, USA

Thanks for your attention!

