Use of electronic devices and screen exposure in a population of preeschoolers with Autism Spectrum Disorder Unidad especializada en TEA

introduction -

Given the ubiquitous presence of electronic devices and its massive use, there is special concern for its effects in young children. Preeschoolers with Autism Spectrum **Disorders** (ASD), constitute a special population among which, to date, the literature addressing screen exposure is limited (1, 2.) In clinical practice, an intensive exposure to different electronic devices is noted. Several studies (3,4) point out that early exposure to screens has a negative impact in different areas of development, including language and social interaction. Given that the first years of life constitute a period of great neuroplasticity, the hypothesis that intensive exposure to screens has a negative impact in develompement and that could modify developmental trajectories, having more impact in vulnerable individuals, in which these abilities are already affected, is considered for this study.



To describe the use of electronic devices in a population of preeschoolers with diagnosis of ASD.

Q: - material and methods -

Transversal, observational descriptive study. The sample is constituted of 27 children aged less than six who were referred to the outpatient clinic specialized in ASD at Hospital Pediátrico Pereira Rossell (Montevideo, Uruguay) in the period July 2017-July 2018 and received an ASD diagnosis. Diagnosis was clinical and using ADOS 2. CBCL 1 $\frac{1}{2}$ - 5 was administered to all participants as well as a questionnaire specially designed for this study.

End: SYRGUTGS

All the participants were exposed to more than one screen of an electronic device. The most used were TV followed by cellular phone. Age at first exposure to screen was prior to six months in 29% (n= 7), and 29%(n=7) between six months and one year of age. Daily time of exposure varies between one hour and more than six, with a 37% (n=10) of the studied children that have a time of exposure that exceeds five hours/day. 17 families had recently reduced screen exposure in their children, despite having received no special advice from health professionals. From these 7 cases reported changes in child behavior coinciding with decrease in screen exposure, including better social interaction and more interest in the social world.

Sample characteristics

	n=27	Number	%
Gender	Boys	20	74
	Girls	7	26
Age (years)	2	4	15
	3	9	33
	4	11	41
	5	3	11
Diagnosis	ASD level 1	8	30
	ASD level 2	13	48
	ASD level 3	6	22

Time of exposure according to AAP recommendation⁵ n=27



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Time of screen exposure per day (hours/subjects)









Conclusions

1. There is an early exposure to screens in crucial periods of social and language development in most studied subjects.

2. Special care should be taken in screen exposure in children aged younger than six months.

3. The great majority of cases exceeds the recommended time of screen exposure.

4. Given the results, we highlight the importance of addressing the subject of screen use and giving advice in regular well child visits.

Limitations

Limited number of subjects in the sample makes conclusitons non-generalizable. Sample comes form a low or deficent socio economic status. Small number of subjects in the sample along with the absence of a control group determined that it was not possible to look for association between variables such as time of screen exposure and intensity of ASD related symptoms. We plan to continue research in this sense.

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