RELATIONSHIP BETWEEN ABSTINENCE FROM MARIJUANA AND SPEECH FLUENCY IN AN ADOLESCENT WITH STUTTERING: IMPLICATIONS FOR SPEECH THERAPY AND PSYCHIATRIC TREATMENT

Relação entre abstinência de maconha e fluência da fala em um adolescente com Gagueira: implicações para o tratamento fonoaudiológico e psiquiátrico

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DEAR EDITOR

Speech therapy has great applicability on the treatment of psychiatric patients, once the evaluation, diagnostic, and treatment of communication disorders may provide help on the clinical management of this particular population.

This letter aims at reporting a successful experiment of the speech-language approach which was carried out with a 16-year-old teenager, male, with communication disorder (*Stuttering* – F98 5 – CID-10) and psychiatric (*Dependence on Cannabis* – F12.2; *Unsocialized Conduct Disorder* – F91.1) diagnosis. The adolescent was assisted at the *Ambulatório de Adolescentes e Drogas do Instituto e Departamento de Psiquiatria da FMUSP* (Ambulatory of Adolescents and Drugs from the Institute and Department of Psychiatry of FMUSP, free translation). All speech-language procedures are part of the routine of this ambulatory; thus, all ethical requirements were met (CAPPesq 636/03).

According to the patient's report, the communication disorder, which started early in his life, is related to his family history and precedes the drug use. It is known that Stuttering is a dysfunction of the motor and temporal control of speech; it is dynamic and evolutionary, and emerges during the childhood, between the ages of 18 months and 7

years. It may occur until the age of 12. Stuttering co occurs with language development and emerges from complex interactions among family history, social context, linguistic processes, and emotional factors, the motor organization of speech, and other aspects. This is a picture that, despite the multifactorial etiology, has genetic basis and corresponds to 80% of the total of stuttering cases which are identified during childhood.

Initially, the demand for care was related to an attempt to control his impulses, once he would put himself in imminent life-threatening situations, due to his criminal life history (he would take part in armed robbery to houses and business establishments). As the psychological and psychiatric interventions helped him control those impulses, the adolescent presented a new demand for treatment: improve his communication skills, intervention that would help him in the search for healthier relationships. This way, the abstinence from the use of marijuana, the only drug ever used by the adolescent (despite having tried other ones), which had never been one of his preoccupations before (he would say that he could not identify injuries resulting from this activity), became the focus of the speech therapy approach.

As the same ambulatory had already confirmed, in previous experiments, that adolescent drug users who are assisted by multidisciplinary and speech therapy care would respond better to the treatment (they would remain in psychiatric treatment for a longer time and, among the drug users, the ones who would use cannabis would be abstinent for a longer period of time)¹, a process of specific approach started in order to promote fluency, being the incentive to marijuana abstinence made as one of the possible strategies to improve the fluency of speech, without being the main goal to the patient.

Conflict of interest: non-existent

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For the speech therapy evaluation, samples of spontaneous speech were collected and normal parameters of fluency evaluation were used: number of normal disfluencies (typical of all speakers), number of stuttered disfluencies (typical of stuttering speakers) and discontinuity of speech (total percentage of breaks in speech).

The pattern of use of cannabis, the findings from the speech-language evaluations of the patient and the normality patterns are described in Table 1.

	1st speech therapy evaluation	2nd speech therapy evaluation	Normality parameter
Pattern of use of marijuana in the week that preceded speech therapy evaluation (sic patient)	"3 marijuana cigarettes a day during the entire week" Total = 21 cigarettes	"3 marijuana cigarettes a day for 2 days; 1 marijuana cigarette a day for 2 days, and I didn't use anything for other 2 days" Total= 8 cigarettes	-
Normal disfluencies	26	19	14.34
	20	19	14.34
Stuttered disfluencies	9	8	2.69
Breaks in speech	17.5%	13.5%	8.59%

Figure 1 – Speech therapy evaluation and normality parameter

Even though the patient had maintained the usage of marijuana, it was much lower than the usual. Literature shows the need of abstinence periods higher than 15 days so that neuropsychological alterations, consequence of the use of cannabis, show withdrawal. In this case, despite of his being abstinent only one day before the second speech-language evaluation, the adolescent still presented stuttering; however, his brain functioning improved enough for his communication to be presented in a more fluent manner (lower number of normal disfluencies and lower percentage of breaks in speech), what shows a better access and planning of the language. The patient was more critical and responsive to his own treatment, what motivated him to try higher periods of abstinence.

In the treatment of adolescent drug users, the main focus by the beginning of the treatment is the bond establishment, in order to guarantee the continuity of the segment. In this case, even though the ambulatory dealt specifically with the use of drugs, the adolescent would accept being there to control his impulses of committing illegal activities and he was taken in in this demand. The attendance focused on this aspect and, to be driven away from the colleagues who would encourage him to steal. he realized he needed to work on his communication. Until then, even though he had been brought to the ambulatory by his mother because of the excessive use of marijuana, this issue was not the focus of his appointments. It was only by the sixth month of treatment, when the initial demand for care had been met, that the adolescent made himself available to deal with the use of marijuana. albeit indirectly. For him, there was no loss or injury caused by the excessive use of the drug, because he did not know the effects it had on the communication process. When he was alerted to this possibility, and especially because of his being motivated to improve his speech, the use of marijuana was then seen as not as beneficial as it was in the beginning. It was then that he started trying to remain abstinent, action he had never taken before.

This case exemplifies the relevance of the actuation of a multidisciplinary team on the treatment of adolescents drug users. It is imperative that the team have the anxiety to approach the issue of abusage or dependence of a drug and invest on the bond establishment and also on approaches to motivate the adolescent to improve his performance on many different aspects. This must be the main goal of the treatment: provide extensive and comprehensive care to the health of the adolescent, developing new skills and improving their global functioning, and not only approaching the issue of drug abuse or dependence. The adolescent should always be the main concern, not the drug. It is not about rehabilitation, but rather to enable and meet young people in their fullness.

REFERENCES

- 1. Oliveira CCC, Scheuer CI, Scivoletto S. Autopercepção da comunicação oral no tratamento de adolescentes usuários de drogas. Rev. Bras. Psiquiatr. [online]. 2006;28(4):340-1.
- 2. Andrade CRF de. Protocolo para avaliação da fluência da fala. Pró-Fono Ver. Atual. Científica. 2000;12(2):131.
- 3. Martins VO, Andrade CRF. Perfil evolutivo da fluência da fala de falantes do português brasileiro. Pró-Fono R. Atual. Cient. [online]. 2008;20(1):7-12.
- 4. Sneider JT, Pope HG Jr, Silveri MM, Simpson NS, Gruber SA, Yurgelun-Todd DA. Differences in regional blood volume during a 28-day period of abstinence in chronic cannabis smokers. Eur Neuropsychopharmacol. 2008 Aug;18(8):612-9. Epub 2008 Jun 20.
- 5. Yücel M, Solowij N, Respondek C, Whittle S, Fornito A, Pantelis C, Lubman DI. Regional brain abnormalities associated with long-term heavy cannabis use. Arch Gen Psychiatry. 2008 Jun;65(6):694-701.

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