

info@mediresonline.org

ISSN: 2836-5038

MINI REVIEW

Restrain From Nootropics: A View Point

Nnodim John Kennedy

Department of Medical Laboratory Science, Imo State University, Owerri Nigeria.

Corresponding Author: Nnodim John Kennedy, Department of Medical Laboratory Science, Imo State University, Owerri Nigeria.

Received Date: 14 September 2022; Accepted Date: 29 September 2022; Published date: 07 November 2022.

Citation: N. John Kennedy (2022). Restrain From Nootropics: A View Point. International Journal of Stem cells and Medicine. 1(1). DOI: 10.58489/2836-5038/001

Copyright: © 2022 N. John Kennedy, this is an open-access article distributed under the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

Introduction

Nootropics is known as smart medications. They belong to a family of pharmaceuticals that have the ability to improve brain function. They are referred to as substances that improve memory or cognition. Nootropics on prescription are drugs with stimulating effects. They can lessen the effects of medical disorders like Alzheimer's disease, narcolepsy, and attention deficit hyperactivity disorder (ADHD) [1].

Nootropics also include over-the-counter medications that improve brain function or focus, such as caffeine and creatine. They do not treat illnesses, but they may have some impact on memory, thinking, or other mental processes [2].

Indeed, any of a class of pharmaceutical substances intended to boost the mental ability of people suffering from neurological diseases and psychiatric disorders is referred to a cognitive enhancer. It is debatable whether healthy people should use these medicines to enhance focus, prolong study sessions, or better handle stress [3].

Furthermore, elderly individuals with decreased reasoning and memory problems brought on by different types of dementia, such as Alzheimer's disease, Parkinson's disease with dementia, dementia with Lewy bodies, and vascular dementia, are administered some cognitive enhancers, such as donepezil and galantamine. ADHD medications such as Ritalin (methylphenidate) and Adderall are frequently used to treat children and young adults with this condition (mixed amphetamine salts). Wakepromoting medications like Provigil provide help from unexpected sleep attacks for people with narcolepsy (modafinil). In general, cognitive enhancers increase alertness, vigilance, working and episodic (eventspecific) memory, attention, and general wakefulness, although they do so by acting on various neurotransmitters [4]

Certain students turned to smart medicines, especially Ritalin and Adderall, to boost their intellectual ability, much like some athletes used anabolic steroids (muscle-building hormones) to artificially improve their physiques. It has been noted that up to 7% of respondents at various American universities had taken smart drugs at least once in their lives, and 2.1% had done so during the previous month [5,6]. People who needed to swiftly recover from jet lag and had demanding jobs were turning more and more to modafinil. Military soldiers assigned to missions requiring lengthy flying times received the same medication [7].

These drugs are frequently obtained illegally by college students, and while they may appear to be beneficial in the short run, they carry significant hazards. Insomnia, hazy vision, high blood pressure, a rapid heartbeat, circulation issues, and addiction are possible side effects.

In conclusion, healthcare professionals in general, and in particular those working in the sectors of mental health and substance misuse, should keep in mind that the use of nootropics is a growing and littleunderstood problem. When psychiatric symptoms suddenly or unexplainably worsen in stable, medication-adherent individuals, nootropic use should be taken into consideration. It's also crucial to keep in mind that the majority of nootropics are not picked up by routine drug toxicity screening procedures.

References

- Kumar, V., Khanna, V. K., Seth, P. K., Singh, P. N., & Bhattacharya, S. K. (2002). Brain neurotransmitter receptor binding and nootropic studies on Indian Hypericum perforatum Linn. Phytotherapy Research, 16(3), 210-216.
- 2. Radhika, P., Annapurna, A., & Rao, S. N. (2012). Immunostimulant, cerebroprotective & nootropic

International Journal of Stem Cells and Medicine

activities of Andrographis paniculata leaves extract in normal & type 2 diabetic rats. The Indian Journal of Medical Research, 135(5), 636.

- 3. Russo, A., & Borrelli, F. (2005). Bacopa monniera, a reputed nootropic plant: an overview. Phytomedicine, 12(4), 305-317.
- Garvey, D. S., Wasicak, J. T., Decker, M. W., Brioni, J. D., Buckley, M. J., Sullivan, J. P., ... & Williams, M. (1994). Novel isoxazoles which interact with brain cholinergic channel receptors have intrinsic cognitive enhancing and anxiolytic activities. Journal of medicinal chemistry, 37(8), 1055-1059.
- Dartigues, J. F., Carcaillon, L., Helmer, C., Lechevallier, N., Lafuma, A., & Khoshnood, B. (2007). Vasodilators and nootropics as predictors of dementia and mortality in the PAQUID cohort. Journal of the American Geriatrics Society, 55(3), 395-399.
- Oyaizu, M., & Narahashi, T. (1999). Modulation of the neuronal nicotinic acetylcholine receptorchannel by the nootropic drug nefiracetam. Brain research, 822(1-2), 72-79.
- Moriguchi, S., Tanaka, T., Tagashira, H., Narahashi, T., & Fukunaga, K. (2013). Novel nootropic drug sunifiram improves cognitive deficits via CaM kinase II and protein kinase C activation in olfactory bulbectomized mice. Behavioural brain research, 242, 150-157.