

Be Aware! Lead Toxicity Could Destroy Your Future

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INTRODUCTION

Lead (Pb) is a toxic metal that has been known for centuries. although the problem of Pb toxicity it is a global one, but it remains rather a matter of concern in developing countries where most of the attention by health agency was focused mainly on presence of Pb in paints and petrol, rubber industry, water, Pb batteries. It intruding our daily life as it shown to be in cosmetics, household utensils, children toys. it might affect both children and adults even if it was in a low concentration. it adversely affects children as neurotoxin, it damages the brain and nervous system leading to impaired growth and development. While in adults it has been shown associated with other disorders with kidney dysfunction and hypertension. Lead has been found to trigger programmed cell death (PCD, also called cell apoptosis) in the central nervous system, including the brain. The present study focused on pharmaceutical products and cosmetics that's contain Pb.

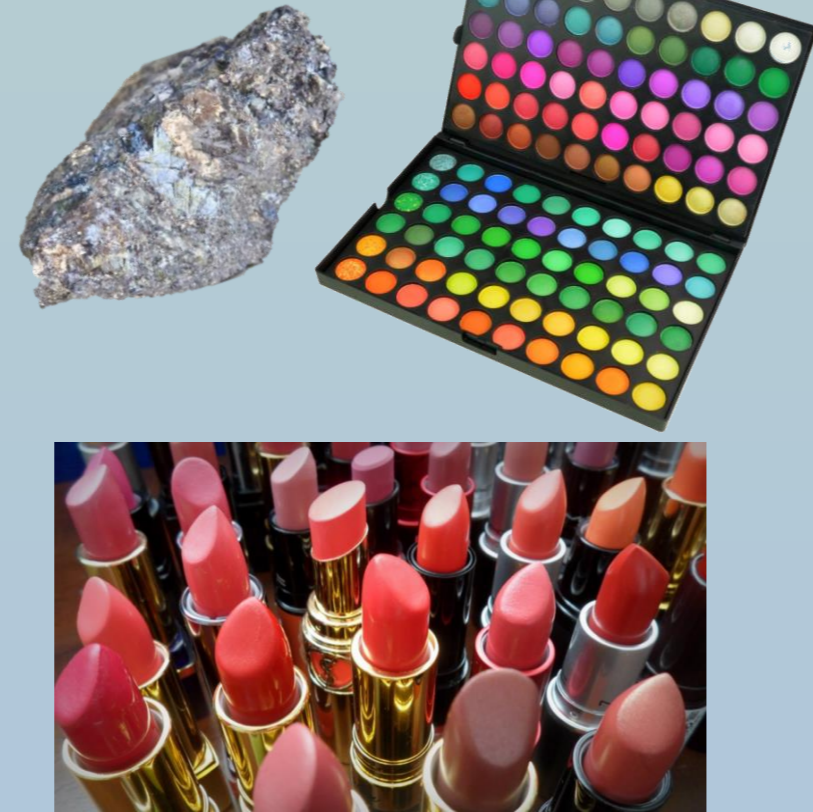
METHOD

Regarding this area of investigation, selected published articles from 1995-2018 were reviewed and their results were incorporated in this thesis. A total of 17 references were reviewed to identify information about possibility of lead contamination in pharmaceutical products, supplements & cosmetics. Electronic search engines for internet, journals, and University of Sharjah library databases were searched using different key words (Lead Toxicity, poisoning by pharmaceutical products, Toxicity in supplements, Heavy Metal contamination in cosmetics)

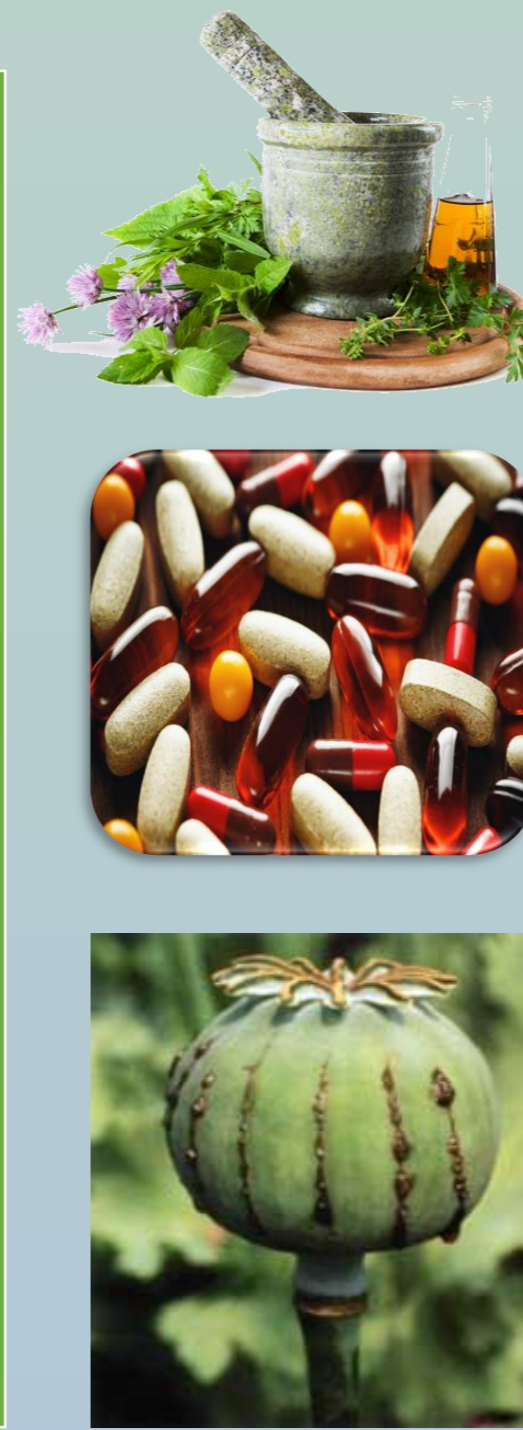
DISCUSSION

Regardless of the concentration present in the tested items, lead is still intruding our life and more importantly constitute a major problem on children as they're the most sensitive to the low level effect. That's why we highly recommended that the government should cover a compulsory Pb blood test particularly for children in the range of 1-3 years. Posters, leaflets, brochures, educational programs. All of these are helpful to raise public awareness.

Lead: A Poison Intruding Our Lives



RESULTS

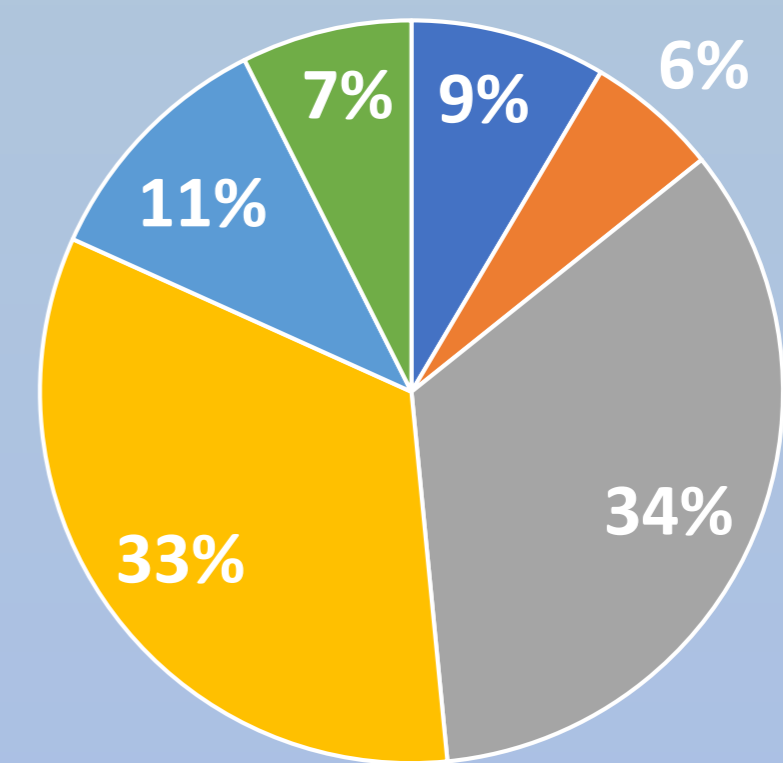


25% exceeded the US.FDA "provisional" total tolerable daily of lead intake for children aged 6 years and under

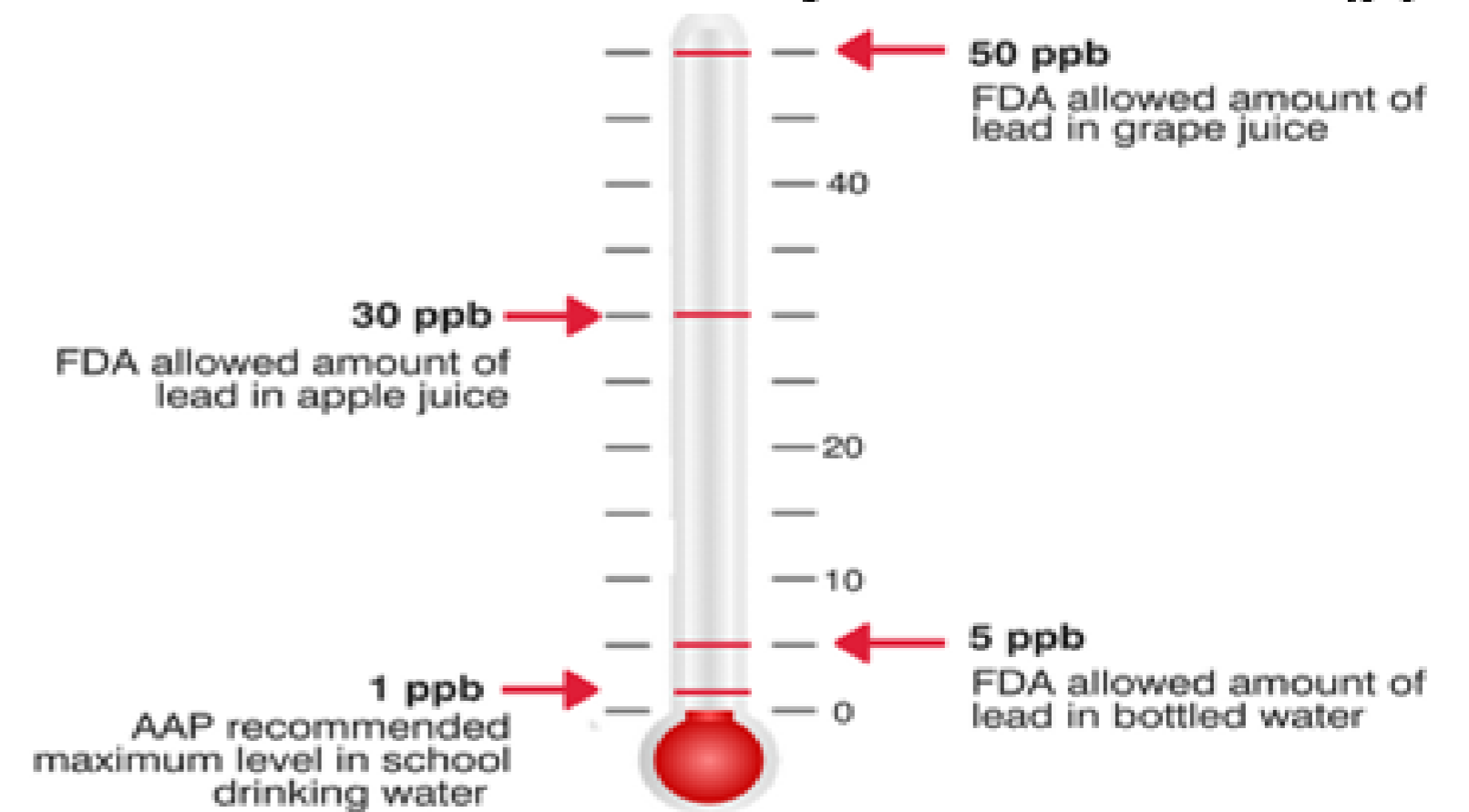
20% of supplements had normalized lead level comparable or lower than cow's milk

Amount Of Lead Found In Lipsticks

■ Body Shop ■ Maybelline (cocoa) ■ Maybelline (pink) ■ L'Oréal ■ M.A.C ■ Dior



Limits on lead allowed in juices and water (ppb)



SELECTED PHARMACEUTICAL PRODUCTS

Product	Avg. Pb conc. found ± St. Dev. (ppb)	Sample replicates	Upper limit at 99% confidence	Max. recommended daily dose (g)	Recommended or prescribed for children?
Turns Chewable Tablets	144 ± 2	2	150	18.6	
Oyster Shell Calcium (CVS)	384 ± 70	2	581	4.3	
Citracal	173 ± 60	3	330	4.9	Yes
Pepto Bismol	147 ± 60	2	316	10.8	
Chewable prescription multivitamins with fluoride & iron (Teva)	498 ± 4	2	507	0.8	Yes
Ibuprofen and Acetaminophen (internet)	316 ± 10	4	340	3.4	
Ibuprofen Tablets (Interpharm)	5 ± 2	5	11	5.2	
Ibuprofen Tablet (URL)	2 ± 2	2	8	1.9	

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