**INTRODUCTION**

What is the PROTECT Initiative (Preventing Overdoses and Treatment Errors in Children Taskforce)?

- Aims to prevent unintentional medication overdoses in children particularly under 5 years old.
- Also focuses on health concerns in the rise in over-the-counter and prescription medication.

In Indiana, cannabis is illegal recreationally – 10,334 exposures in 2015 to At least 41% of cases Approximately 2000 edibles packages compared with 36 Display acuity vs duration through matplotlib stacked bar charts Candy edibles contain color palettes Medical effects categorized based on most affected system similarity with candies edibles packages.

**REASONS AND MOTIVES:**
- The primary reason behind cases was intentional marijuana abuse.
- With unintentional usage in second
- And intentional suicide attempts in third

**OBJECTIVES:**
- Analyze the trends of cannabinoid exposures in the US
- Analyze the reason why children are attracted to cannabis
- Collect candy edibles data from major cannabis dispensary
- Analyze the trends of cannabinoid exposures in teens
- Collect candy edibles data from major cannabis dispensary

**METHODOLOGY**

**INDIANA POISON CONTROL**
- Receive data from Indiana Poison Control Center
- Clean/organize data:
  - Substances categorized based on ingredients
  - Medical effects categorized based on most affected system
- Visualize data:
  - Display distributions of therapies and medical effects through matplotlib pie charts
  - Display acuity vs duration through matplotlib stacked bar charts

**MARIJUANA SCRAPING**
- Collect candy edibles data from major cannabis dispensary (Weedmaps, Grassdoor)
- Desired output: Product name, Packaging image, Candy type, THC (%), CBD (%)
- Analyze color distribution in packaging. Visualize it as histogram of RGB color code values (0-255)
- Collect 30 – 40 packaging images of children’s candy from various brands.
- Compare similarity between packaging of candy edibles and children’s candies.

**RESULTS: INDIANA POISON CENTER**

**CASE DEMOGRAPHICS**

- Distribution of Age of Exposure
- Duration: 8 hrs <= 24 hrs
- 24 hrs <= 1 week
- 1 week <= 1 month
- 1 month <= 3 months
- > 3 months

**SYSTEMS AFFECTED:**
- The most affected system was the neurological system
- Followed by the cardiovascular system
- And then the GI/endocrine system

**RESULTS: MARIJUANA PACKAGING SIMILARITY**

- Approximately 2000 edibles packages compared with 36 sample children candies packages.
- Most candies edibles packages share 60 - 70% color similarity to actual children's candy's packages.
- Mean: 0.618 Standard Deviation: 0.146 Median: 0.637

**SUMMARY**

- The majority of cases are those under 5 years old
- There isn’t a significant difference between genders

**RESULTS: MARIJUANA PACKAGING SIMILARITY**

- Life Savers Gummies Neon (297) and Snickers (262) share the most similarity with candies edibles packages.
- Candy edibles contain color palettes similar to other gummies and chocolate packages.
- White packages are harder to compare due to difficulties cropping it from the background.

**DISCUSSION AND FUTURE GOALS**

**CANNABIS PRODUCT PACKAGING:**
- Colorful packaging has a higher similarity rate with other products, despite differences
- We assumed children find bright colors more appealing than the product’s shape or actual color.

**CANNABINOID INGESTION DATA FROM INDIANA POISON CENTER:**
- Severe overdoses can lead to central nervous system depression, renal failure, and other serious health issues.
- Children’s overdoses often result from adult oversight and mental health issues.

**FUTURE GOALS**
- Create a dashboard of statistical analysis we have performed
- Increase public awareness of substance abuse and policy implications

**MAJOR OUTCOME: HEALTH EFFECTS & THERAPIES APPLIED**

Neurological systems are affected less frequently
Gl and renal/endocrine systems’ cases increase
Observation only not an option due to severity
No therapy is recommended

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**REFERENCES**