

Consumer Awareness and Marketing Strategies for Counterfeit Medicine

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PROJECT SUMMARY

Counterfeit Medicine

- Counterfeit medicine includes fraudulent, mislabeled, incorrect ingredients, fake packaging, insufficient active ingredients.

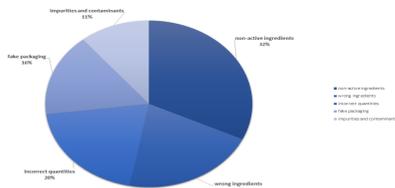


Fig 1: Different types of counterfeit medicine

Research Methodology

Objective

Analysis on buyers awareness about the use of counterfeit medicines in UAE.

Hypotheses

- H1:** low accessibility of the legitimate drug, higher purchase intention for counterfeit medicine
- H2:** high consumers' awareness of the societal consequences of drugs, low is the purchase intention of counterfeit medicine
- H3:** high price of the legitimate drug, higher is the purchase intention for counterfeit medicine
- H4:** high is the brand awareness of genuine medicine, low is the purchase intention for counterfeit medicines

FACTS

- Market value of \$200 Billion annually
- \$75 billion market online for counterfeit medicine
- Counterfeit medicine market share is 10% of total turnover of industry
- 10-30% in developing countries.
- 1.2 million people die from counterfeit medicine annually.
- An estimated 1 in 10 medical products in low- and middle-income countries is substandard or falsified.

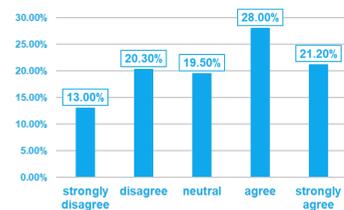


Fig 2: Worldwide seizure of counterfeit medicine

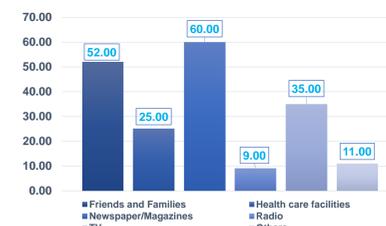
SUMMARIZE MAIN QUESTIONS AND RESULTS HERE WITH FIGURES ETC

The main of the study was to figure out the awareness level and give suggestions regarding marketing strategies

I am aware of existence of fake medicine (N=96)



What are your sources of information about fake medicines?



Approaches and results

Factor Analysis

- To find out which factor affects more or relevant over others.
- KMO and Bartlett's test regarding reliability is much above that 60.

| | | |
|----|--|---|
| H1 | lower accessibility of the legitimate drug, higher purchase intention for counterfeit medicine | ✗ |
| H2 | higher consumers' awareness of the societal consequences of drugs, lower is the purchase intention of counterfeit medicine | ✓ |
| H3 | higher price of the legitimate drug, higher is the purchase intention for counterfeit medicine | ✗ |
| H4 | higher is the brand awareness of genuine medicine, lower is the purchase intention for counterfeit medicines | ✓ |

After running the regression, it is noticed that effectiveness of medicine is related to the brand of the medicine and consumer consider the family recommendation while purchasing the medicine.

$$Y=2.503789+0.270598X1+0.366831X2-0.06757X3$$

Regression equation is the above where,
x1= brand awareness,
x2= societal consequences,
x3= brand awareness

In the table below, it can be seen the p value of the factors and what is the impact.

| | Coefficients | standard Err | t Stat | P-value |
|--|--------------|--------------|----------|-------------|
| Intercept | 2.503789 | 0.421 | 5.947246 | 4.98955E-08 |
| When purchasing the medicine I will consider the brand (brand awareness) | 0.270598 | 0.085204 | 3.175871 | 0.002039774 |
| When purchasing the medicine I will consider the family recommendation (Societal Consequences) | 0.366831 | 0.08292 | 4.423896 | 2.68184E-05 |
| I will consider medicine to be fake if there is fake packaging (Brand Awareness) | -0.06757 | 0.078293 | -0.86298 | 0.390415491 |

Results

Cluster Analysis

- Divided the whole sample into groups.
- All demographics information collected properly.
- People who are post graduate and graduate learn about the medicine from the social media and T.V were the income level is at average and above average. People with the education background of secondary high school, graduate, and lesser than secondary education learn about medicine from T.V and bill board with the income level below average.

SUPPLY CHAIN

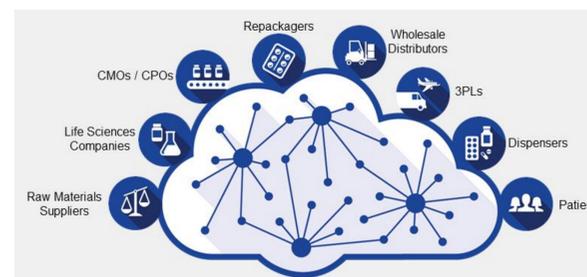


Fig 3. supply chain

CONCLUSION AND SOLUTION



App development

Hologram

DUBAI HEALTH AUTHORITY

Key Findings from the report



Fig 4. on collaboration from DHA Report

Dubai healthcare Authority (DHA) report of 2016, shows steady increase in population of the country at 5%. It is noticed that the growth rate for number of daily visits has dropped dramatically in 2014. The reason for the fall is the implementation of tougher laws on counterfeit medicines. The new law puts tougher law into place, the maximum penalty under the new law is imprisonment of up to two years and/or a fine of as much as AED 1 Million. The maximum penalty is reserved for pharmaceuticals and food industry but there is AED 250,000 for any counterfeit good being caught. This made a dip but soon people could find the loop wholes and raised again. There is again a drop in 2016. This is due to the implementation of a new scanning system, Tru Scam, it helps to detect a fake or counterfeit within 7 seconds and secondly initiating E-prescription for transparency to ensure that no patient can misuse a prescription with mind not in correct state.

REFERENCES

- DHA Policy and Procedures. (June 1, 2016). *Dubai health authority*.
- Sean Peas good, S. C. (April 8, 2015). A simple solution to protect consumer and pharma companies from the dangerous fake drugs. *Counterfeit pharmaceutical*.
- Cannon, D. T. (2015). War through pharmaceutical: How Terrorist Organizations are Turning to Counterfeit Medicine to Fund Their Illicit Activity. *Case Western Reserve Journal of International Law* 47