



**ORIGINAL RESEARCH PAPER**

**Management**

**A STUDY ON AWARENESS AND ACCEPTANCE OF ADULT DIAPERS IN MADURAI CITY WITH SPECIAL REFERENCE TO KAMAL HEALTH CARE PRODUCTS (P) LTD, TUTICORIN**

**KEY WORDS:** Adult diapers, urinary incontinence

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**ABSTRACT**

India may be the youngest country in the world in 2020 however by 2050, as many as 325 million people, or 20 per cent of the population, will be 'elderly' says a report by the non-profit organization 'Help Age India.' Currently, India has 103.9 million elderly people above the age 60 which is about 8.5 per cent of the population. The elderly population is growing at about 3.5 per cent per year, double the rate for the population as a whole. While the overall population of India will have grown by about 40 per cent between 2006 and 2050, the elderly population will have grown by 270 percent according to the report by the ministry for statistics and programme implementation.

India is in the position to develop lots of support facility to handle the health problems faced by aged people. In addition there will be lots of marketing opportunities for such health care products. The present study focuses on one such health care product 'Adult Diaper' used to handle an old age discrepancy - urinary incontinence. This problem is faced by most of the aged population. This may due to weak bladder muscle, overactive bladder, which may affect the normal life of the aged people both physically and mentally. The emerging adult diaper industry supports those people through their products and makes them feel comfortable.

The present study tries to make out whether the people in Madurai city, are aware of adult diaper and also to identify whether they accept adult diaper. It also tries to spot the attributes that may influence the consumers to buy it. It further tries to observe the brand they use and the market leader of the product in Madurai city. Additionally it tries to recognize the awareness and acceptance of AVM Super Dry brand in Madurai city. The research design used here is descriptive and the data was collected from the retailers as well as the consumers using two separate questionnaires. The result found was, most of the respondents were aware of the product adult diaper and people prefer the brand with high absorbency, odor control and good comfort. Currently, the Madurai market is ruled by the brand "Friends".

**1. INTRODUCTION**

According to 2016 report by the ministry for statistics and programme implementation, India has 103.9 million elderly people above the age 60 which is about 8.5 per cent of the population. The elderly population has grown at about 3.5 per cent per year, double the rate for the population as a whole. A 2014 report by the non-profit Help Age India shows that India will be the youngest country in the world in 2020 however by 2050, as many as 325 million people, or 20 per cent of the population, will be 'elderly'. The overall population of India will have grown by about 40 per cent between 2006 and 2050. Further the report adds that the elderly population will have grown by 270 per cent.

India is in the position to develop lots of support facility to handle the health problems faced by aged people. In addition there will be lots of marketing opportunities for such health care products. The present study focuses on one such health care product 'Adult Diaper' used to handle an old age discrepancy - urinary incontinence. This problem is faced by most of the aged population. People with incontinence will have difficulty in leading a normal life due to urine leakage. Urinary incontinence may due to weak bladder muscle, overactive bladder, which may affect the normal life of the aged people both physically and mentally. The emerging adult diaper industry supports those people through their products and makes them feel comfortable.

Incontinence is a medical condition that could be treated. It is usually a symptom of some other health related problem. Incontinence or loss of bladder or bowel control is a symptom, not a disease in itself. A broad range of conditions and disorders could cause incontinence, including birth defects, pelvic surgery, and injuries in the spinal cord, neurological diseases, multiple sclerosis, poliomyelitis, infections and degenerative changes associated with aging.

The severity of urinary incontinence in humans ranged from partial to complete loss of bladder control. Varying degrees of

urine loss may be experienced and the condition may alter with time. For example person with light incontinence may have leakage when they laugh or cough, while person with heavy incontinence may experience continuous leakage. No two humans are alike and no two humans are affected by incontinence in the same way.

Urinary incontinence may be studied as Male Urinary incontinence and Female Urinary incontinence. Male urinary incontinence may be caused by number of health related issues like mobility impairment, prostate problems and the treatments required to correct them were the most frequent cause of urinary incontinence in men. The two most common problems were Benign Prostatic Hyperplasia (BPH) and prostate cancer, often treated with surgery. While women incontinence may be of distressing, several treatments and management options were available like biofeedback, electrical stimulation, mobility impairment, medications and surgery, some may experienced as a result of child birth. In both male and female individuals the use of adult diapers may help to maintain a normal lifestyle and it will also helps to move with self-confidence. The disposable diapers fit snugly and are available in small, medium, large and extra-largesizes. Some of these diapers have elastic leg gathers to improve the fit and prevent leakages.

The present study tries to make out whether the people in Madurai city, are aware of adult diaper and also to identify whether they accept adult diaper. It also tries to spot the attributes that may influence the consumers to buy it. It further tries to observe the brand they use and the market leader of the product in Madurai city. Additionally it tries to recognize the awareness and acceptance of AVM Super Dry brand in Madurai city. The research design used here is descriptive and the data was collected from the retailers as well as the consumers using two separate questionnaires.

**2. Review of literature**

A detailed review of literature was done and it was identified

that brand awareness could be increased through a relationship making program involving targeted marketing campaigns and strong supply chain management to increase the consumer base for the brand (Beverland, 2001); rural consumers prefer to buy the goods in small packets at lower price (Garga, Ghuman, and Dogra, 2009); In a study to identify the factors influencing purchase of a product, the product quality was ranked as first, followed by retail price (Banumathy and Hemameena, 2006); In a study conducted at north Tamilnadu it was found that the taste was the main factor for preference of particular brand and also the television played a vital role in influencing the consumer to go for a particular brand (Shanmugasundaram, 1990); Aggarwal (2014) suggested that consumer behavior research is a scientific study of the methods consumers use to select, secure, use and dispose of products and services that satisfy their needs.

Based on the literature review, it was identified that there are lots of studies related to consumer buying behavior of FMCG products. However, studies related to awareness and acceptance of Health Care products was scarce in Tamil Nadu. Hence, the researcher identified the gap and the problem "To identify acceptance and awareness of adult diapers" was formulated. Based on the identified problem, objectives were listed, with special reference to "AVM Super Dry" brand manufactured by Kamal Health Care Products (p) Ltd, Tuticorin.

**3. Research Methodology**

The main aim of the project is to identify the awareness and acceptance of adult diapers in Madurai city. The objectives of the study are listed as follows.

- To study the level of awareness of customers about Adult diapers with special reference to Madurai city.
- To study the level of acceptance of customers about Adult diapers in Madurai city.
- To identify the attributes which influence the consumers to purchase a particular brand of adult diaper
- To identify the attributes which influence the retailers to prefer the brand they stock.
- To identify whether there is a potential market for AVM Super Dry brand in Madurai city.

The study is purely descriptive in nature. Hence, descriptive research design was used. Both primary and secondary data was used for the study. The primary data was collected mainly through the distribution of questionnaires. Spearman's Rank correlation and Percentage analysis Method were the statistical tools used to analyze the data. However, the study is based on primary data. The researcher has to depend upon the information given by the respondents

**3.1 Instrumentation**

Questionnaire was the Instrument of data collection for the present study. Two questionnaires were designed by the researchers, one for the retailers and another one for the consumers. The questionnaire for retailers consists of two parts. Part one elicits demographic information. Part two is subjective. It consists of 27 items relating to Product awareness, Brand awareness and factors influencing the retailers to prefer a brand. The questionnaire for the consumers also consists of two parts. Part one elicits demographic information. Part two is subjective. 34 items were listed to get the response from the consumers relating to Product awareness, Brand awareness and factors influencing the consumers to prefer a brand.

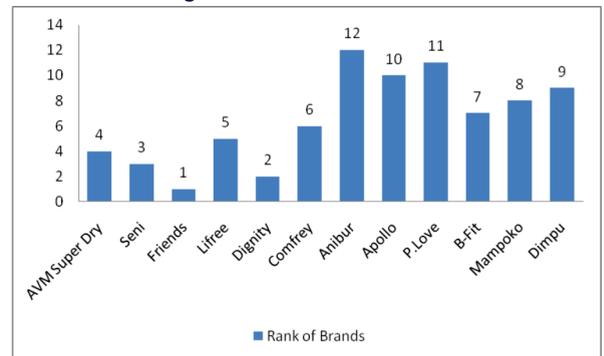
**3.2 Sampling Technique**

Sampling method used here is Convenience Sampling, a non-probability sampling method. This study involves two groups, including Retailers as well as Consumers. The sample size of Retailer group is 37 and the Consumer group is 66.

**4. Analysis of Data**

Spearman's Rank correlation and Percentage analysis Method were the statistical tools used to analyze the data.

**Chart 4.1 Showing Ranks of Brands**



From the chart 1 it can be inferred that AVM Super Dry brand is ranked as 4<sup>th</sup>. However, brand Friends has huge demand and it is ranked as number 1 in the Madurai market. Dignity is ranked as 2, Seni as 3, Lifree as 5, Comfrey as 6, B-Fit as 7, Mamypoko as 8, Dimpu as 9, Apollo as 10, P.Love as 11 and Anibur as 12.

**4.1 Spearman's Rank Correlation**

A Group of Male and Female respondents were asked to rank the attributes of adult diapers based on which they purchase or will purchase adult diapers. The ranks allotted by the individual respondents were scored and based on the aggregate of the scores; ranks for the factors assigned by the groups were calculated. Spearman's rank correlation was used to identify whether there exists any correlation between male and female customers in choosing a particular brand based on the attributes of the product.

**Table 4.1 showing the ranks of attributes influencing purchase behavior**

Attribute Gender	High absorbency	Odor control	Thinness	Brand	Price	Comfort
Male	1	2	5	6	4	3
Female	1	2	6	4	5	3

**Table 4.2 showing the calculation of Spearman's Rank correlation coefficient**

Rank of Male -R <sub>1</sub>	Rank of Female -R <sub>2</sub>	(R <sub>1</sub> -R <sub>2</sub> ) <sup>2</sup> D <sup>2</sup>
1	1	0
2	2	0
5	6	1
6	4	4
4	5	1
3	3	0
		$\sum D^2 = 6$

**The formula to calculate Spearman's Rank correlation coefficient**

$$\rho = 1 - \frac{6 \sum D^2}{N^3 - N}$$

$$\rho = 1 - \frac{6(6)}{6^3 - 6}$$

$$\rho = 1 - \frac{36}{210}$$

$$= 1 - 0.17$$

$$\rho = 0.83$$

From the above table 4.2 it can be observed that  $\rho = 0.83$ . Hence, it can be inferred that there is a high degree of positive correlation between male and female respondents while

considering the attributes of the brand. It can be observed that both male and female respondents ranked high absorbency as 1 and odor control qualities as 2 and comfort as 3. Hence, it can be inferred that these are main attributes on which the adult diaper manufactures has to focus on for better acceptance of their brand. However, women ranked brand as 4<sup>th</sup> and men ranked price as 4<sup>th</sup>. Based on this it can also be inferred that men are more price conscious than women and women are more brand conscious than men.

### 5. DISCUSSION

India is the youngest country in the world. However, about 8.5 per cent of the population is elderly moreover as many as 325 million people, or 20 per cent of the population, will be 'elderly' by 2020. India is in the position to develop lots of support facility to handle the health problems faced by aged people. In addition there will be lots of marketing opportunities for such health care products. The present study focuses on one such health care product 'Adult Diaper' used to handle an old age discrepancy - urinary incontinence. This problem faced by most of the aged population. People with incontinence will have difficulty in leading a normal life due to urine leakage. From the study it was observed that, the consumers were ready to use the diapers if the need arises and they felt it to be hygienic. This shows that there will be lots of marketing opportunities for Kamal Health Care Products as well. However, the product awareness is more when compared to brand awareness. Subsequently, Kamal Health Care Products has to do promotional activities for AVM super dry to help the brand to reach the consumers at ease. Based on this study it can be inferred that people prefer the brands with high absorbency, odor control and good comfort. So, Kamal Health Care Products may focus on these qualities to exploit the opportunity of a huge market. It is observed that, Retailers stock Friends Brand rather than AVM super dry. Hence a Good supplier relationship may be developed to make the retailers stock the brand and promote it to the consumers.

### 6. CONCLUSION

This study evidenced that majority of the respondents in Madurai city are aware of the product adult diaper. Elderly people and their family members have understood the benefits and usage of adult diapers and they accept it. However, "Friends" brand is ranked number one by consumers in Madurai city. Hence, Kamal Health Care Products has to focus on promotional activities for AVM super dry to help the brand to reach the consumers at ease.

### REFERENCES

1. Dr. S.P. Gupta, Dr. M.P. Gupta, 2017, Business Statistics-Eighteenth Edition- Sultan Chand and sons, New Delhi, ISBN:978-93-5161-012-0
2. Kothari C R(2014), Research Methodology Methods and Techniques, New Age International Publishers Ltd, New Delhi, ISBN:9788122436235.
3. <https://www.cambridge.org/core/journals/international-journal-of-technology-assessment-in-health-care/article/effectiveness-of-diapers-among-people-with-chronic-incontinence-in-thailand/Bc96D580019A1F7FF>
4. [http://ethesisarchive.library.tu.ac.th/thesis/2017/TU\\_2017\\_5902040061\\_8384\\_6755.pdf](http://ethesisarchive.library.tu.ac.th/thesis/2017/TU_2017_5902040061_8384_6755.pdf)
5. <https://www.sciencedirect.com/science/article/abs/pii/S10493867117300178>
6. [https://scholar.google.co.in/scholar?start=10&q=acceptance+and+awareness+of+adults+diapers+journals&hl=en&as\\_sdt=0,5&as\\_vis=1#d=g\\_s\\_qabs&u=%23p%3DbBFsXDfTZacj](https://scholar.google.co.in/scholar?start=10&q=acceptance+and+awareness+of+adults+diapers+journals&hl=en&as_sdt=0,5&as_vis=1#d=g_s_qabs&u=%23p%3DbBFsXDfTZacj)
7. <https://www.marketwatch.com/press-release/global-adult-diapers-market-share-to-touch-us-145-billion-by-2024-2019-03-21>
8. <https://www.bizjournals.com/boston/news/2018/07/31/somerville-startup-launches-online-brand-for-adult-amp.html>
9. <https://www.freepressjournal.in/cmcm/mumbai-sewri-tb-hospital-runs-out-of-adult-diapers-for-bedridden-patients>
10. <https://www.scihd.com/doc/12598375/Review-of-Literature-on-Brand-Awareness>
11. <https://m.indiamart.com/kamal-healthcare-products/about-us.html>
12. <https://www.grandviewresearch.com/industry-analysis/adult-diapers-market>
13. <https://www.kamalhealthcare.com/>