



## **Influence of Covid-19 Safety Protocols on Production and Sale of Sachet Water in Nsukka Local Government Area, Enugu State, Nigeria**

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### **Abstract**

This study examined the influence of covid-19 protocols on the sales of sachet water in the Nsukka Local Government Area of Enugu state. Three research questions guided the study. However, only 140 sellers of sachet water who were willing to participate in the study constituted the sample. The instrument for data collection was a structured questionnaire titled: Influence of covid19 protocols on the sales of sachet water questionnaire (ICPMDSBWQ) which was validated by three lecturers from the Department of Business Education, University of Nigeria, Nsukka. The collected data were analysed using frequency and percentage scores. The general findings of the study indicated that sachet water sellers lost customers because of not enforcing the wearing of masks in their outlets during the pandemic. Social distancing reduced the number of customers while the lockdown led to a decrease in the sales of sachet water. Based on the findings, the study recommended among others, that manufacturers of consumables such as sachet water enforce health and safety protocols to ensure sustainable business progress even during a global crisis such as Covid -19.

**Keywords:** Covid-19 Protocols, Sachet water, Manufacturing industries, Sales

### **Introduction**

The World Health Organisation declared covid-19 a pandemic on March 11, 2020 (WHO, 2020). Coronavirus Disease (covid19) acronym was created by the World Health Organisation (WHO). It stands for the respiratory illness caused by the coronavirus SARS-CoV-2. The

incubation time for COVID-19 ranges from 1-14 days, most commonly being around 5 days (WHO, 2020). Several wholesale and retail businesses in manufacturing industries were impacted by covid19 lockdown that lasted from 26 March to 4 May 2020 (NCDC, 2020), as well as a range of

continuity of restrictions on market activities and travel after the lockdown was lifted. From 4 May, markets and manufacturing industries like sachet water manufacturing industries were permitted to open three days per week from 9 am to 3 pm (Hakeem et al 2021). Wearing of nose mask was compulsory in the market and also in the manufacturing industries. Hand-washing facilities were available in the market and manufacturing industries to curb the spread of the virus to an extent. The COVID-19 crisis and the consequent lockdown affected every aspect of modern living.

The economy was largely brought to a standstill, and almost every country was on the brink of a recession (Hoekstra & Leeftang, 2020). Some of the measures used to contain the virus such as social distancing, lockdown and wearing of nose masks affected the distribution of various consumable goods such as drinking water. Access to the water of sufficient quantity and acceptable quality was one of the major problems faced by many households in urban areas such as Nsukka. This led to increased demand for water packaged in disposable plastic bottles and small sachets, as well as in large refillable containers (Sridhar et al., 2017).

Sachet or potable water is water packaged in plastic materials for human consumption. It is meant to be packaged under hygienic and sanitary conditions to achieve acceptable quality in terms of its physical, chemical, microbiological and acceptability parameters so that it can be safely consumed as drinking. Efforts should therefore be made to maintain sachet water quality at the

highest possible level. Sachet water comes from a variety of sources including municipal tap water, natural springs and wells (Shallcross, 2022). The sale of sachet water has increased in recent years due to the perception that it is safe, hygienic, and/or handy and also because of its aesthetic appeal (Doria et al., 2009). Sachet water is easier to use when people are in crises like in covid19 pandemic compared to families sharing the same cups for drinking water.

Sachet water manufacturers distribute their products through marketing intermediaries such as wholesalers and retailers or they may sell directly to the consumers. The manufacturers have to ensure that the products are readily available to the distribution outlets. The whole sellers and retailers function as the middlemen who buy sachet water in bulk from the producers and sell it to the consumers. These intermediaries are very necessary because production cannot be completed until the goods get to the final consumers. Sachet water business has been a very profitable business in Nsukka before covid19 pandemic. However, as a result of the pandemic, sachet water sellers might have experienced changed buying behaviours. The shutdowns and reductions in work activities were likely to have affected sales, customers' patronage, and substantial lost income for business owners and might even result in a decrease in employment and permanent closure of some companies (Block et al., 2021; Senol et al., 2021).

**Purpose of the study:** The purpose of this study was to examine the influence

of covid-19 safety protocols on sales of sachet water in Nsukka LGA, Enugu state, Nigeria. Specifically, the study determined the;

- i. influence of covid-19 nose mask wearing on the sales of sachet water in Nsukka LGA, Enugu State, Nigeria;
- ii. influence of covid-19 social distancing on the sales of sachet water in the study area, and
- iii. influence of covid-19 lockdown on the sales of sachet water in the area.

### **Methodology**

**Study design:** The study adopted a descriptive survey research design to find out the influence of covid19 protocols on the sales of sachet water in Nsukka LGA Enugu State, Nigeria. According to Nworgu (2015) descriptive survey is a type of research design in which a group of people or items are studied by collecting and analysing data from only a few people or items considered representative of the entire population.

**Population for the study:** The population of the study consisted of about 200 sachet water manufacturers/sellers in Nsukka Local Government Area.

**Sample selection technique:** The sample for the study comprised 140 sachet water manufacturers/ sellers drawn through the convenience sampling technique. According to (Lavrakas, 2008) convenience sampling is a type of non-probability sampling in which people are sampled simply because they are a "convenient" source of data for researchers. In probability sampling, each element in the population has a known non-zero chance of being

selected through the use of a random selection procedure. The technique was used because only willing sachet water sellers constituted the sample population size.

**Instrument for data collection:** The instrument used for data collection was a structured questionnaire made up of three parts. The first part obtained information on the influence of covid-19 nose mask-wearing on the sales of sachet water. The second part focuses on the influence of covid-19 social distancing on the sales of sachet water. The third part obtained information on the influence of covid-19 lockdown on the sales of sachet water. Items in 1, 2 and 3 were placed on Yes or No scale to determine the percentage of the responses.

**Validation and reliability test of instruments:** The instrument was validated by three experts from the Department of Business Education, University of Nigeria Nsukka. The instrument was administered to 140 sellers of sachet water. The instrument was subjected to Cronbach Alpha reliability analysis. The result showed a reliability coefficient of 0.82, indicating that the instrument was reliable.

**Statistical analysis:** The data collected from the respondents were analyzed using frequency and percentage. Percentages  $\geq 50\%$  were accepted as a factor. The computation was done with the application of statistical products for service solutions (IBM SPSS version 20).

## Results

### Effects of covid-19 nose mask wearing on the sale of sachet water

The result presented in Table 1 showed the effects of covid-19 nose mask-wearing on the sale of sachet water. The result showed that 86.4% of sachet water sellers reported a loss of customers because of not enforcing mask orders in

their shops, and 62.1% reported that an increase in the price of nose masks decreased sachet water sales. Also, regular purchases of nose masks increased the overall cost of production (61.4%). Some (55.7%) of sachet water sellers gained some customers because of enforcing mask rules in the shop.

**Table 1: Frequency and percentages of the respondents on the effects of Covid-19 nose mask wearing on the sales of sachet water.**

Effects of covid-19 nose mask wearing on the Sales of sachet water	Frequency	%	Frequency	%
	Yes		No	
An increase in the price of nose masks decreased sachet water sales.	87	62.1	53	37.9
Regular purchases of nose masks increased the overall cost of production.	86	61.4	54	38.6
Lost customers because of not enforcing mask orders in the shop.	121	86.4	19	13.6
Gained some customers because of enforcing mask rules in the shop.	78	55.7	62	44.3

### Effects of social distancing on the sales of sachet water

The result presented in table 2 showed the effects of social distancing on the sales of sachet water. The result showed that compliance with social distancing reduced the number of customers sachet water sellers could attend to in a day (87.1%). Many (61.4%) reported that social distancing decreased the distribution of sachet water to families. Social distancing also affected store communication among 80.0% of the respondents and delayed the production of sachet water (52.9%).

**Table 2: Frequency and percentages of the respondents on effects of social distancing on the sales of sachet water.**

Effects of social distancing on sales of sachet water	Frequency	%	Frequency	%
	Yes		No	
Social distancing reduced the number of customers.	122	87.1	18	12.9
Observing social distancing in public transport increased transportation fees.	44	31.4	96	68.6
Social distancing decreased the distribution of sachet water to families	86	61.4	54	38.6
It affected store communication.	112	80.0	28	20.0
Social distancing delayed the production of sachet water.	74	52.9	66	47.1

**Effects of covid19 lockdown on the sales of sachet water**

The result presented in table 3 showed the effects of the lockdown on the sales of sachet water. The result showed that 87.1% of the respondents reported that the lockdown led to a decrease in sales. Lockdown also limited sales time (80.7%), led to appointment

shopping (55.7%) and reduced the number of customers (53.6 %).

**Table 3: Frequency and percentages of the respondents on the effects of covid19 lockdown on the sales of sachet water.**

Effects of covid19 lockdown on the sales of sachet water.	Frequency	%	Frequency	%
	Yes		No	
It led to a decrease in sales	123	87.9	17	12.1
It reduced the number of customers.	75	53.6	65	46.4
Led to appointment shopping	78	55.7	62	44.3
Limited sales times	113	80.7	27	19.3
Hindered access to some customers.	43	30.7	97	69.3

**Discussion of Findings**

The findings of the study revealed that the Covid19 safety protocol of wearing a nose mask affected the sale and distribution of sachet water. Regular purchase of nose masks increased the overall cost of sachet water distribution during the pandemic and the increase in the price of nose masks decreased sachet water sales. This is probably because most businesses preferred to use disposable nose masks which were believed to be more hygienic than washable ones. They, therefore, had to buy them

frequently which generally added to the expenditure of the business. The further finding showed that many of the sellers lost customers because of not enforcing mask orders during the pandemic. However, some reported gaining more customers because they enforced mask rules in the shop. When at a store, customers felt more comfortable if other buyers were wearing a mask. Wearing a mask makes customers feel less likely to contact the virus, therefore, businesses that did not enforce mask-wearing rules during the pandemic were more likely to lose their

customers. A similar finding by Senol et al. (2021) showed that small businesses experienced a decrease in business sales as a result of complying with the safety protocols.

The findings of the study also revealed that social distancing reduced the number of customers, decreased the distribution of sachet water to families, affected store communication and delayed the production of sachet water. This might be because, fewer workers were able to be at the workplace at a time, hence increasing the workload of the workers, thereby delaying production. Compliance with social distancing also reduced the number of customers a sachet water seller could attend to in a day, especially in industries that do not have enough space. Social distancing affected the way sellers of sachet water related with their customers. This was expected because many businesses limited the number of customers that could be attended to per time. This led to diminished customer presence at business premises and hence cordial interaction with sellers.

The findings revealed that covid19 lockdown led to a decrease in sales of sachet water, limited sales time of sachet water, led to appointment shopping, and also reduced the number of customers. Lockdown reduced the marketing of sachet water significantly by reducing the number of days and hours, sachet water sellers could make their products available to customers. These findings support earlier findings of Aragbonfoh (2021) who observed that as a consequence of the lockdown, many businesses were shut down and had diminished sources of revenue. Nicola et al. (2020) also noted that as a consequence of covid19 lockdown, businesses especially SMEs which include the sachet water business suffered from the diminished demands.

## Conclusion

The findings of this study highlighted the impact of the Covid-19 safety protocols on the production and distribution of sachet water. Wearing nose masks, social distancing and locking down all affected the sachet water business in various ways. While the enforcement of nose mask-wearing improved business patronage, it also led to an increase in the overall cost of production. Social distancing affected the number of customers that could be attended to at a time and also affected the interaction between workers and customers. On the other hand, the lockdown affected the movement of people and goods, hence limiting the distribution of water to consumers. The outbreak of covid-19 and the resultant lockdown took a heavy toll on the sachet water manufacturing industries in Nsukka.

## Recommendations

1. Masks should be used as part of the business strategy to increase sales. The focus of sachet water manufacturers should be on limiting the direct impact covid-19 on employees and customers whilst supporting efforts to limit the spread of the virus.
2. The content and channels used to reach new and existing customers must be given extra thought. While social distancing has become the new normal for businesses embracing digital strategies and technology has and will continue to help increase sales.

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