



# KNOWLEDGE OR LAW: WHAT DRIVES PUBLIC HEALTH PRECAUTIONS

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## ABSTRACT

*In this study, we explore how individual awareness and legal mandates influence public health precautions. Through a comprehensive survey of 100 participants and statistical analysis, we examine the factors driving adherence to health precautions. Participants in this study were asked to complete a self-prepared questionnaire to assess their attitudes, behaviours, and perceptions concerning health risks, legal obligations, and personal motivations. Results indicate that personal influences, such as trust in respected individuals, social pressure, and awareness, influence behaviour, with legal consequences playing a significant role. Based on a study of road accidents in Kerala, the analysis extends to real-life consequences. To ensure widespread compliance with the law, it is imperative not only to raise awareness, but also to enforce stringent laws. The paper concludes by making recommendations for enhancing public awareness campaigns, rigorous law enforcement, community engagement, improved communication channels, as well as continuous assessment of public health policies. Overall, the findings of this study provide valuable insights for designing effective health policies and interventions, taking into account the complex dynamics between legal requirements and awareness of health issues.*

**KEYWORDS:** *Public health, health precautions, legal compliance, chi-square test.*

## INTRODUCTION

Public health is a field in which awareness and legal mandates interact intricately to impact individual behaviour and societal outcomes. It is important to understand the dynamics of why people adhere to health precautions, whether as a result of personal awareness or legal obligations, in order to design effective health policies and interventions. The study explores the subtle nuances of public attitudes, and the motivations that influence individuals to adopt health precautions. As this research unravels the complex network of factors influencing behaviour, it aims to shed light on the crucial question: are people motivated by genuine awareness, or are they primarily influenced by legal requirements? A detailed analysis and comprehensive surveys are used in this paper to understand the underlying motivations for public health practices in order to provide valuable information into the formulations of targeted public health policies and campaigns.

## PARTICIPANTS AND METHODS

The study was conducted in a random sample comprising 100 individuals from the general public, ensuring a diverse representation by including both genders and various age groups. The study method employed was a survey using self-prepared questionnaire designed to explore participant's attitudes and behaviours related to health precautions, awareness, and laws. The questionnaire included questions addressing participants' awareness of health risks, understanding of implemented laws, and their motivations for following health precautions. Questions were carefully crafted to indirectly gauge the subject's inclinations towards public health due to awareness or legal obligations. The software program SPSS was used to analyse the primary data. Methodology of statistics Chi-square analysis was done. This quantitative research technique allowed us to systematically

examine the textual data, identifying recurring themes, patterns and nuances in participant's responses. Subjective and objective type of questions were included to ensure the accuracy of the response. Responses were coded into categories related to awareness, legal mandates, and motivations, enabling a detailed analysing of the study group's perspectives. Participants were informed about the study purpose and provided their consent before the survey. All responses were anonymized and kept confidential to ensure their privacy. Additionally, data from Kerala government's official websites and newspapers also used for the analysis.

## LIMITATIONS

While the random sampling method enhances the study's external validity, the sample size of 100 participants might limit the generalizability of the findings to larger populations. The reliance of self-reported data might introduce subjectivity in the interpretation of responses.

## Questionnaire adapted

1. Have you ever adapted a health precaution because someone you know respect or admire follows it?
2. Have you ever felt social pressure to follow a health precaution?
3. Have you ever changed a health-related behaviour after learning about the experiences of others?
4. Do you believe that observing others following health precautions encourages you to do the same?
5. Do you think people in our community are generally aware of the severity of health risks associated with not following precautions?
6. Have you ever taken a health precaution more seriously after hearing about severe consequences in the news or from others?



7. Do you trust the accuracy of health-related information you find online or in the media?
8. Have you ever doubted the authenticity of health information you encountered?
9. Do you believe that legal consequences are necessary to ensure people follow health mandates?
10. Have you ever refrained from a risky health behaviour due to fear of legal consequences?
11. Have you ever discussed health laws or regulations with others in your community?
12. Have you ever changed a health-related behaviour after seeing it portrayed in a TV show, movie, or documentary?
13. Do you think media representation of health-related issues influence public behaviour?
14. During a public health crisis, do you believe stricter enforcement of health-related laws is necessary?
15. Have you personally complied with health mandates more rigorously during a crisis situation?

## RESULT AND ANALYSIS

**Table 1: Responses of Participants**

Q. No	No. of people responded as “yes”	No. of people responded as “no”
1	26	74
2	71	29
3	49	51
4	20	80
5	79	21
6	58	42
7	43	57
8	21	79
9	85	15
10	86	14
11	47	53
12	45	55
13	63	37
14	88	12
15	75	25

**Table 2: Analysis using Chi-Square Test**

Qs no.	Null hypothesis	Alternative hypothesis	P value	Null hypothesis acceptance status
1	There is no association between adapting a health precaution and whether someone they know or respect follows it.	There is an association between adapting a health precaution and whether someone they know or respect follows it.	.000	null hypothesis is rejected
2	there is no association between feeling social pressure to follow a health precaution	there is association between feeling social pressure to follow a health precaution	.000	null hypothesis is rejected
3	there is no association between learning about the experiences of others and changes in one’s health related behaviour	there is association between learning about the experiences of others and changes in one’s health related behaviour	.841	null hypothesis is accepted
4	there is no association between observing others following health precautions and an individual’s sticking to health precautions.	there is association between observing others following health precautions and an individual’s sticking to health precautions	.000	null hypothesis is rejected
5	people in our community are not generally aware of the severity of health risks associated with not following precautions	people in our community are generally aware of the severity of health risks associated with not following precautions	.000	null hypothesis is rejected



6	there is no association between hearing about severe consequences in the news or from others and individuals taking a health precaution.	there is association between hearing about severe consequences in the news or from others and individuals taking a health precaution.	.110	null hypothesis is accepted
7	there is no difference in the level of trust in the accuracy of health-related information in online and media.	there is no difference in the level of trust in the accuracy of health-related information in online and media.	.162	null hypothesis is accepted
8	There is no significant association between encountering health information and doubting its authenticity.	there is significant association between encountering health information and doubting its authenticity.	.000	null hypothesis is rejected
9	there is no association between legal consequences believing in the need for legal consequences and making sure people obey by health regulations.	there is association between legal consequences believing in the need for legal consequences and making sure people obey by health regulations.	.000	null hypothesis is rejected.
10	there is no association between refraining from a risky health behaviour and the fear of legal consequences	there is association between refraining from a risky health behaviour and the fear of legal consequences	.000	null hypothesis is rejected
11	there is no association between people talking about health legislation or regulations and their neighbourhood.	there is association between people talking about health legislation or regulations and their neighbourhood.	.549	null hypothesis is accepted
12	there is no association between people's changed health-related behaviours and their exposure to portrayals in documentaries, TV series, and movies.	there is association between people's changed health-related behaviours and their exposure to portrayals in documentaries, TV series, and movies	.317	null hypothesis is accepted
13	there is no association between believing that media representation of health-related issues influences public behaviour.	there is association between believing that media representation of health-related issues influences public behaviour.	.009	null hypothesis is rejected
14	there is no association between believing stricter enforcement of health-related laws and being in a public health crisis.	there is association between believing stricter enforcement of health-related laws and being in a public health crisis.	.000	null hypothesis is rejected
15	there is no association between crisis situation and people's individual compliance to health mandates.	there is association between crisis situation and people's individual compliance to health mandates.	.000	null hypothesis is rejected

## DISCUSSION

### Findings of the analysis

- A person is more likely to adhere to health precautions if someone they trust or respect does so.
- Health precautions are often followed in response to social pressure
- Understanding the experiences of others does not significantly influence changes in health-related behaviour.
- Observing others follow health precautions may influence an individual's compliance.



- Most community members are aware of the risks associated with failing to follow health precautions.
- Individuals are not significantly influenced to take health precautions by hearing about severe consequences.
- There is a similar level of trust in the accuracy of health-related information provided by online and media sources.
- When encountering health information online or in the media, there is a tendency to doubt its authenticity.
- The belief that legal consequences are necessary is associated with a higher level of compliance with health regulations.
- Individuals refrain from engaging in risky health behaviours due to a fear of legal consequences.

**Table 3: statistical data of road accidents in Kerala from 2018 to 2022 due to not following health precautions**

Cause of accident	2018 <sup>1</sup>	2019 <sup>2</sup>	2020 <sup>3</sup>	2021 <sup>4</sup>	2022 <sup>5</sup>
Mobile talking	-	20	13	12	99
Drunken driving	157	110	76	77	166
Over speeding	29775	-	-	-	-
Jumping red light	105	-	-	-	-
Driving on wrong side	1455	-	-	-	-

When analyse table 2, there is a significant role for traffic rule violation in contributing to road accidents. Even though they know the effects, people are not bothered about it and their life. When the covid was its peak, public were hesitant to wear masks and keep social distancing which compelled the government to make the laws stricter by increasing the fine amount to 2000<sup>6</sup>. Total number of cases registered against non-wearing of mask as on 15/03/2022 is 38295836<sup>7</sup>. It is said by the Kerala police department that after increasing the fine, people started to wear mask and there was considerable decrease in the covid cases<sup>8</sup>.

### CONCLUSION

These findings provide valuable insights into the complex interaction between awareness, legal requirements, and public compliance with health precautions. It is true that some individuals are influenced by the experiences of others or media portrayals, but a significant portion of the population requires external pressures, such as legal consequences or social pressure, in order to comply with health regulations. As indicated in the study, merely raising awareness might not be sufficient to ensure widespread adherence to health precautions, as stringent laws and societal expectations are equally crucial to shaping public behaviour. Furthermore, the analysis of road accidents in Kerala emphasizes the real-life consequences of not following health precautions. People often neglect safety measures in spite of being aware of the risks, resulting in a number of accidents and, in the context of the COVID-19 pandemic, contributing to the spread of the disease.

### RECOMMENDATIONS

**Enhancing Public Awareness Campaigns:** Although legal consequences are critical, there is also a need for continuous and targeted public awareness campaigns. To create a sense of personal relevance, these campaigns should emphasize educating the general public about the serious health risks associated with non-compliance by using real-life examples and testimonials.

**Stricter Enforcement of Health Mandates:** According to the study, stricter enforcement of health-related laws, especially during public health crises, can have a positive effect on public behaviour. Individuals who violate health regulations should be deterred from doing so by law enforcement agencies who enforce these laws consistently and clearly.

**Community engagement and peer influence:** community leaders, influencers and respected individual should participate in awareness campaigns which can leverage social influence to encourage adherence to health mandates.

**Improved communication channels:** efforts should be made to provide reliable and verified information through official channels.

**Education and empathy:** public education initiatives should emphasize on empathy, and make them understand that the potential consequences of their actions are not only on themselves but on people surrounding them also.

**Regular assessment and evaluation:** public health policies and interventions should be monitored continuously based on the changing behaviour of the public. Regular assessments can ensure that the rules and policies remain effective and valid according to the need of public.

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