

## KNOWLEDGE, ATTITUDE AND PRACTICE TOWARDS CHOLERA AMONG HEALTH CARE PROFESSIONALS WORKING IN PRIVATE CLINICS OF DISTRICT WEST KARACHI

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### Abstract

Cholera remains a determined risk in many urban areas of Pakistan and it due to unsafe drinking water, improper sanitation, and late reporting. This study aims to assess the Knowledge, Attitude, and Practice (KAP) regarding cholera among registered healthcare professionals (HCPs) working in private clinics of District West Karachi. A cross-sectional survey among 120 professionals discloses moderate knowledge levels, a generally positive attitude, but variable practices particularly in patient health education and case reporting to authorities. Addressing these gaps through continuous training and integration with public health infrastructure is essential.

### INTRODUCTION

Cholera is a highly communicable disease which caused by *Vibrio cholera* (CDC, 2024) transmitted primarily through contaminated water and food (Cholera, n.d.a). When people exposed to cholera usually they not become ill even they also not know about the attack of bacteria because most of the time its remain asymptomatic but the person play a major role in spreading of cholera, mild to moderate illness of cholera comprises on watery diarrhea while severe infection may lead to dehydration, imbalance electrolytes and some time can also lead to shock (Cholera-Cholera - Symptoms & Causes, n.d.).

Khan et al., (2022) Cholera continues to pose a public health burden in low-resource settings like

Karachi. While public hospitals are integrated into surveillance systems, private clinics often lack formal communication with district health authorities, despite serving a significant portion of the population (Gomes et al., 2022). This study explores the Knowledge attitude and practice related to cholera among these private health professionals, aiming to support early detection and outbreak control.

Objectives of this study were to assess knowledge regarding cholera symptoms, transmission, and treatment.

To evaluate attitudes of HCPs toward cholera prevention and public health.

To analyze clinical practices include diagnosis, hygiene, and case reporting.

### Literature Review

Cholera is a significant global health threat, especially in low- and middle-income countries (*Cholera – Global Situation*, n.d.) According to the World Health Organization cholera causes an estimated 1.3 to 4 million cases and 21,000 to 143,000 deaths worldwide each year. Its prevalence is closely tied to inadequate water supply, poor sanitation, and lack of awareness.

Several studies have highlighted the crucial role of healthcare professionals in cholera prevention and control (*Cholera*, n.d.-b).

Many studies emphasized the need for early case detection and community education, especially in urban slums. Rahman, (2020) noted that private healthcare providers in Bangladesh, while often the first point of contact for patients, are frequently excluded from national surveillance efforts, leading to underreporting and delayed outbreak responses.

In Pakistan, the burden of cholera is underreported due to weak health systems and the informal nature of private healthcare. A report by the Ministry of National Health Services *Pakistan Case Study*, n.d.(2021) indicated that many private clinics lack standardized protocols for infectious disease reporting. Studies by Riaz et al., (2019) confirm that knowledge among healthcare providers about cholera management is moderate, but practical implementation remains inconsistent.

Training and continuing medical education (CME) programs have shown promise in improving KAP

scores. For instance, a controlled intervention study in India (Singh et al., 2018) demonstrated that CME improved both awareness and compliance with reporting protocols among private practitioners.

Therefore, a gap exists between knowledge and practice in private clinical settings, particularly concerning hygiene practices, patient counseling, and disease reporting. This review underscores the importance of targeted KAP assessments to inform policy and public health strategy.

### Methodology

This descriptive cross-sectional study was conducted among healthcare professionals working in private clinics of District West Karachi to evaluate their knowledge, attitude, and practice (KAP) regarding cholera. A purposive sampling technique was employed to select 120 registered healthcare providers, including general practitioners and homeopaths. Data were collected using a structured, self-administered questionnaire that contained both closed- and open-ended items, divided into sections on socio-demographic information and KAP indicators. The instrument was pre-tested for clarity and reliability, with necessary adjustments made prior to final administration. Ethical approval was obtained from the relevant institutional review board, and informed consent was secured from all participants. Data were analyzed using SPSS version 23.0, with results presented as frequencies, percentages, and mean scores. Cross-tabulations were also used to explore associations between demographic characteristics and KAP levels, with a significance level set at  $p < 0.05$ .

### Results

Table 1. Demographic Profile of Respondents

Variable	Frequency (n=120)	Percentage (%)
Gender (Male)	75	62.5
Gender (Female)	45	37.5
Profession (MBBS)	70	58.3
Profession (Homeopath)	50	41.7
Experience >5 years	65	54.2
Experience ≤5 years	55	45.8

Table 2. KAP Scoring Summary

Component	Frequency (n=120)	Percentage (%)
Knowledge (Good)	50	41.7
Knowledge (Moderate)	45	37.5
Knowledge (Poor)	25	20.8
Attitude (Positive)	65	54.2
Attitude (Neutral)	35	29.2
Attitude (Negative)	20	16.6
Practice (Good)	40	33.3
Practice (Average)	50	41.7
Practice (Poor)	30	25.0

### Key Indicators Visualized

A bar chart below summarizes the major indicators (see Figure 1):

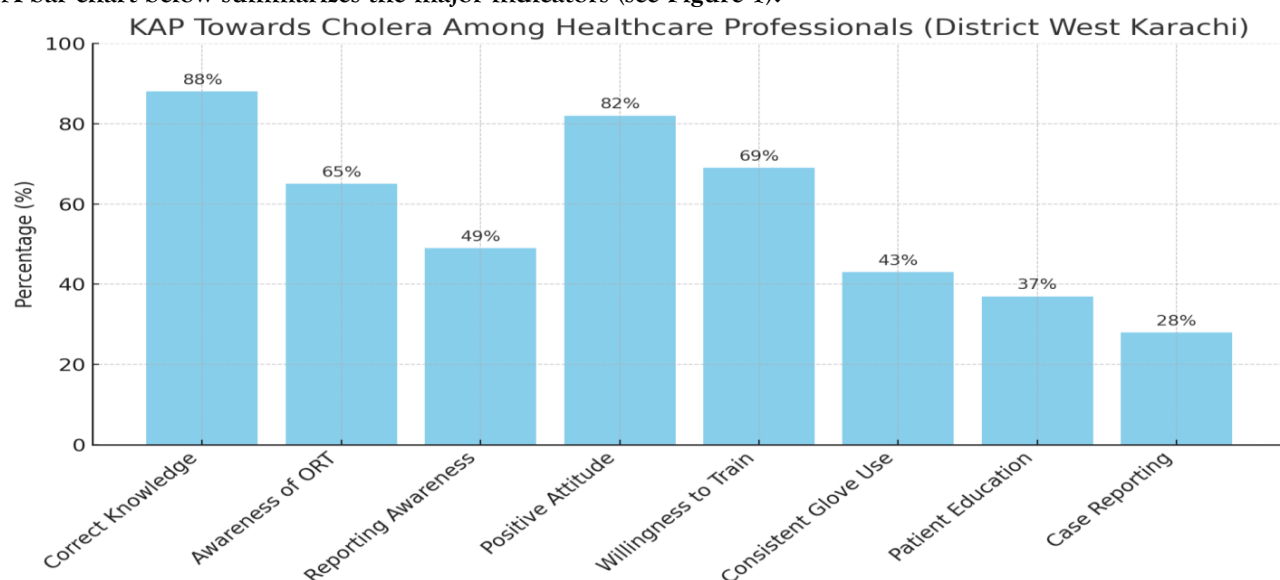


Figure 1: KAP Indicators among Private HCPs

- Correct knowledge: 88%
- Awareness of ORT: 65%
- Awareness of legal reporting: 49%
- Positive attitude: 82%
- Willingness to train: 69%
- Regular glove use: 43%
- Patient education: 37%
- Case reporting: 28%

### Discussion

The findings shows moderate levels knowledge among private healthcare professionals regarding cholera symptoms and management, consistent with studies (Elimian et al., 2023). However, the

knowledge has not translated into unchanging practice. Less than one-third regularly report cases or provide hygiene awareness education, revealing a breakdown between awareness and application.

Caution in reporting may be related to a lack of clear management, fear of clinic inspection, or simply no motivation. Further, while most professionals understand that cholera is preventable, preventive actions like safe water education and hand hygiene implementation are not routine. Integration of private health care providers into the public disease surveillance network is vital.

## Conclusion

This study discloses boosting knowledge and attitudes among private clinic-based health care professionals, but significant practice gaps remain in cholera control. Addressing these through structured, district-level training, guidelines for private setups, and real-time digital reporting tools could seriously enhance outbreak response capacity.

## Recommendations

Implement mandatory, free CMEs modules on cholera.

Distribute visual IEC materials (in Urdu or local language) in private clinics.

Launch a mobile reporting app for private clinics.

Establish regular communication between district health offices and private practitioners, especially for communicable disease like cholera.

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