

# KNOWLEDGE, ATTITUDE AND PRACTICE REGARDING PHYSIOTHERAPY TREATMENT OF BELL'S PALSY AMONG ADULTS

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**Abstract:** A severe disorder of the seventh cranial nerve known as Bell's palsy is best described by weakness on one side of the face. Alternatively, both sides of the face. Individual mistake Bell's palsy for a stroke because it mimics stroke symptoms due to ignorance. This study seeks to ascertain how well-aware adults are of Bell's palsy, its causes, symptoms, and treatments.

**Objective:** This KAP survey's primary goal is to assess the level of understanding, attitude, and practice considering the physiotherapy procedure of adult bell's palsy.

**Methodology:** This was a descriptive, cross-sectional study that was carried out in Gujranwala district of Pakistan from August to end of November 2022. Males and female of Pakistani national were included but those between the age of 20–60-year-old. A pretested, self-administered questionnaire was used to gather information about sociodemographic characteristics and knowledge, attitude, and practice of Bell's palsy. Before beginning any data collection procedures, any questions participants had regarding the questions were answered and cleared up.

**Results:** The average age of the adults in this proposed investigation was  $38.16 \pm 10.462$  years and there were 190 (50.8%) males and 184 (49.2%) females. There were 260 (69.5%) educated and 114 (30.5%) uneducated people, and there were 259 (69.3%) people who lived in urban areas and 115 (30.7%) people who had links to rural areas. Out of 374 participants, source of knowledge about bell's palsy were from relatives (40.11%), Tv (23.80%), Internet (19.25%), and Health care professionals (16.84%). The overall good knowledge was present among 29.41% participants, 47.86% had good attitude and 34.22% had good practice. There was a strong association. Regarding attitude, Age, gender, residence, and education all had a significant relationship ( $p < 0.05$ ). There was a significant relationship between age, gender, residence, and education and practice ( $p < 0.05$ ).

**Conclusion:** There was average knowledge present among adults with positive sense of attitude and with average practices regarding physiotherapy treatment of bell's palsy. The demographic variables revealed important relation with

knowledge, attitude, and practice. The difference between knowledge and attitude was significant, knowledge and practice were significant, and attitude and practice were also significant.

**Index Terms-** Knowledge, Attitude, Practice, Bell's Palsy, Physiotherapy, KAP survey.

## I. INTRODUCTION

The term bell's palsy was coined by Scottish Charles Bell (1774-1842), who defined it as the facial spasms or loss of consciousness.<sup>1</sup> Bell's palsy often impacts only one aspect of the face, but in 1% of instances, paralysis or weakening can affect both sides of the face.<sup>2</sup> In general, the 7th cranial nerve, or facial nerve, controls facial movements and expressions. The facial nerve controls salivation, teeth-showing, frowning, and blinking.<sup>3</sup>

Bell's palsy is caused by injury or infection in the 7th cranial nerve. It mostly affects people between the ages of 15 and 60, and both men and women are equally affected.<sup>4</sup> Bell's palsy usually strikes suddenly. The patient usually wakes up in the morning with action loss on one side of his or her face, which they attribute to a stroke.<sup>5</sup> Bell's palsy is a typical neurological condition but debatable condition. Bell's palsy's etiology is still unknown, but some common causes include neck, head tumors, infections, colds, some say it's a viral infection caused by influenza, and some say diabetics, hypertensive patients, and Bell's palsy is more likely to occur in pregnant women.<sup>6</sup>

It is estimated that one out of every 70 individuals will develop bell's palsy at some point in their lives, with 10% developing it as a result of a family history of the condition.<sup>2</sup> Affected person will complain of the following symptoms: inability to close or open affected eye properly, inability to show teeth, difficulty in smiling, inability to elevate eyebrow, absence of forehead wrinkles, difficulty in opening mouth, drooling of affected side of face, pain or numbness, accumulation of food inside the mouth, reduction in tear production, and dripping of

saliva.<sup>3</sup>Comparatively speaking, Bell's palsy is a rare disease, and its annual incidence is also very low, 15–30 persons out of every 100,000 people are impacted. Bell's palsy rarely affects youngsters, it often affects people who are 15 to 60 years old. Bell's palsy occurs in males and females equally.<sup>7</sup>Bell's palsy treatment includes both acute and ongoing care.<sup>5</sup>To enhance face function and lessen problems, physical therapy treatments include electrotherapy, massage therapeutic exercise, and heat therapy. Physiotherapy techniques aimed at retraining the

muscles aid in the prevention of muscle contractures and atrophy of the facial muscles.<sup>8</sup>Because physiotherapy aids in the restoration of lost facial movements and the enhancement of strength. However, most people are unaware of its treatment. The intent is to assess adults' knowledge, attitudes, and practices regarding physiotherapy treatment of Bell's palsy.

## II. METHODOLOGY

The respondent was chosen through non-probability convenient sampling based on the study protocol. A structured self-generated survey with a predetermined layout was used to gather data on KAP bell's palsy from adults who had been conveniently sampled. Physiotherapists, medical students, and paramedic staff were not included in the study. 374 participants' data were collected. The duration of research was 4 months. This is a descriptive, cross-sectional study that was carried out in Gujranwala district of Pakistan from August to end of November 2022. Males and female of Pakistani national were included but those between the age of 20–60-year-old. Participants' informed consent was obtained before data collection began, and they were fully informed of the research's purpose. Before beginning data collection procedures, any questions participants had regarding the questions were answered and cleared up. Data were gathered in accordance with the study's inclusion and exclusion criteria. Just ten minutes were needed to complete the survey's questions. Four categories were included in the survey: demographics, knowledge, attitude, and practice. Demographic factors include things age, gender, place of residence, and education. The survey asks participants 16 questions in total, including 9 about their knowledge (Knowledge1-Knowledge9) which demonstrated the participants' level of understanding of the physiotherapy used to treat Bell's palsy, 4 about their attitudes (Attitude1-Attitude4) which demonstrated the participants' level of attitude of the physiotherapy used to treat Bell's palsy. and 3 about their practice (Practice 1- Practice 3) which displayed the participants' practice in relation to the physiotherapy they underwent for their bell's palsy. The data was coded, entered, and analyzed using SPSS 20.

## III. RESULTS

Demographic characteristics of participants are mentioned in table no1 which demonstrate that there were 190 (50.8%) males and 184 (49.2%) females. There were 260 (69.5%) educated and 114 (30.5%) uneducated people, and there were 259 (69.3%) people who lived in urban areas and 115 (30.7%) people who had ties to rural areas

**Table no-1 Frequency Distribution of Sociodemographic Factors'**

Variables	Frequency	Percent
<b>Males</b>	190	50.8
<b>Females</b>	184	49.2
<b>Educated</b>	260	69.5
<b>uneducated</b>	114	30.5
<b>Urban</b>	259	69.3
<b>Rural</b>	115	30.7
<b>Total</b>	374	100

Figure – 1 shows that Out of 374 participants, source of knowledge about bell's palsy were from relatives (40.11%), Tv (23.80%), Internet (19.25%), Health care professionals (16.84%).

**Figure no-1 of Source of Information**

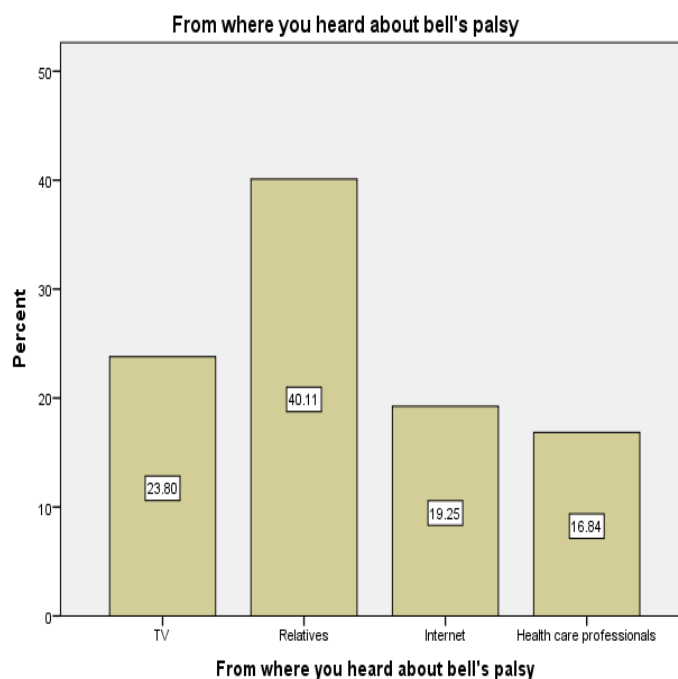


Table -2 shows there were 110 (29.4%) who had a good level of knowledge, 179 (47.1%) who had a good level of attitude, and 28 (34.2%) who had a good level of practise.

**Table – 2**Level of Knowledge, Attitude and Practice

Variable		n (%)
Level of knowledge in participants	Good	110(29.4)
	Average	236(63.1)
	Poor	28(7.5)
Level of Attitude in participants	Positive	179(47.9)
	Average	176(47.1)
	Negative	19(5.1)
Level of practice in participants	Good	28(34.2)
	Average	193(51.6)
	Poor	53(14.2)
	Total	374(100)

**Table 3:**shows that there was significant relation between Attitude and Knowledge ( $p<.000$ ), and the relation between Practice and knowledge was also significant ( $p<.000$ ), and there was significant relation between attitude and practice ( $p<.004$ ).

**Table 4:**Association of Knowledge and Attitude among students

Association		Pearson @	Approx. Sig.
Attitude vs knowledge		0.307	<.001
Practice vs knowledge		0.207	<.001
Attitude vs Practice		0.147	.004

#### IV. DISCUSSION:

In this current study, the mean age among the adults was  $38.16\pm 10.462$  years and there were 190 (50.8%) males and 184 (49.2) females. There were 260 (69.5%) educated and 114 (30.5) uneducated people, and there were 259 (69.3) people who lived in urban areas and 115 (30.7) people who had links to rural areas. Out of 374 participants, source of knowledge about bell's palsy were from relatives (40.11), Tv (23.80), Internet (19.25), and Health care professionals (16.84). The overall good knowledge was present among 29.41% participants, 47.86% had good attitude and 34.22% had good practice. There was significant relationship between knowledge with age, gender, residence, and education ( $p<0.05$ ). Regarding attitude, there was a significant relationship with age, gender, residence, and education ( $p<0.05$ ). Regarding practice, there was a significant relationship with age, gender, residence, and education ( $p<0.05$ ).

Study conducted to check Bell's Palsy "Laqwa": Survey Based Study It was discovered that only 61.67% of 120 students were aware of Bell's palsy. Only 26.67% are aware of the causes, 46.67% are aware of the signs and symptoms of animal behavior, and 33.3% are aware of treatments based primarily on home remedies. 44.167% of students believe it will happen again, and only 26.67% are aware of the precautions. The overall survey is based on degree students' knowledge of a disease known as Bell's palsy. Most students are unfamiliar with the term "Bell's palsy" but are familiar with the term "Laqwa."<sup>2</sup>

Participants' awareness was generally observed to be poor; however, the most risked age group demonstrated slightly better knowledge, as 32.6% of the participants in the age group of 36-50 years and 20.9% in the age group of 20-35 years demonstrated significantly ( $p=0.058$ ) good level of knowledge when compared to 18.2% of the age group of 20 years and 19.4% of the age group of 50 years.<sup>5</sup>

In the western region of Saudi Arabia, a study on Bell's palsy knowledge and awareness among the general population was conducted. The research found a statistically significant relationship ( $P=.022$ ) between sex and Bell's palsy knowledge. Additionally, having a history of Bell's palsy was significantly linked to having a high level of knowledge: 38.1% of participants with a history of facial palsy did so, compared to 17.6% of those without ( $P=.019$ ). They appear to have sufficient awareness based on their satisfactory knowledge of anatomy, diagnosis, and treatment. Dental professionals and students should be exposed to any medical conditions that may arise due to iatrogenic causes.<sup>6</sup>

#### RECOMMENDATION(S):

- Increase public awareness of physiotherapy treatment for Bell's palsy.
- Educational programs on physiotherapy treatments should be held at the community level to raise awareness.

#### LIMITATION(S):

- It was not possible to generalize the findings of this study to the entire nation because it was only conducted in the Gujranwala district.
- It's possible that knowledge, attitude, and practices were undervalued.

## V. CONCLUSION

There was average knowledge present among adults with positive sense of attitude and with average practices regarding physiotherapy treatment of bell's palsy. The demographic variables revealed important relation with knowledge, attitude, and practice. The difference between knowledge and attitude was significant, knowledge and practice were significant, and attitude and practice were also significant.

### Conflict of Interest

There was no conflict of interest.

### Financial Statement

No fundings were given by any authorities; it was a project thesis of doctor of physical therapy.

### Data availability

Data will be provided on the demand by corresponding author.

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