

Chiropractic care and levels of satisfaction among brewery workers

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Abstract

Introduction

Chiropractic is a therapeutic approach that emphasizes the interrelationship between the musculoskeletal system, the spine, and the nervous system. It involves the manipulation of affected areas and serves as an alternative form of healthcare. In 1895, after a decade of clinical analysis, Dr. Daniel David Palmer in Davenport, Iowa, discovered a novel method for patient care. A few years later, he established the first chiropractic school in 1897 in the same city, known as the Palmer School and Cure World Federation of Chiropractic, 2019.

Object of study

To assess the perceived satisfaction of chiropractic care among workers in the brewing industry.

Methodology

This study is a cross-sectional, descriptive, observational analysis utilizing a non-probabilistic sample comprised of employees from a brewery located in Tuxtepec, Oaxaca. Measures of central tendency and percentages were employed for the quantitative variables. Following the acquisition of informed consent, clinical histories, posturometry assessments, spinal manipulations, and, in certain instances, soft tissue therapy were conducted. A Likert-type questionnaire, consisting of 14 items, was administered to evaluate the following dimensions: doctor-patient relationship (items 1, 2, 3), quality of care (items 4, 5, 6, 7, 9, 11), professionalism (items 8, 10, 12), and treatment efficacy (items 13, 14). Responses were scored from 0 to 4, corresponding to the options: totally disagree, disagree, neither agree nor disagree, agree, and totally agree. This process was executed by the researchers and received endorsement from experts, achieving a reliability score of 7.9 as determined by Cronbach's alpha.

Keywords

Chiropractic,
brewing industry,
Cronbach's alpha,
satisfaction by
gender

Results

Overall satisfaction was 79.2% across both genders. In terms of satisfaction by gender, 80% of women reported high satisfaction with chiropractic care, compared to 78% of men.

Introduction

Chiropractic, as a health service, serves as an alternative to traditional healthcare. In 1895, after a decade of clinical analysis, Dr. Daniel David Palmer in Davenport, Iowa, discovered a novel approach to patient care. A few years later, in 1897, he established the first chiropractic school in the same city, known as the Palmer School, which is part of the World Federation of Chiropractic, 2019.

Conversely, Mexican culture has preserved traditions aimed at the well-being of the population through a framework of concepts, beliefs, and practices designed to address various societal ailments, with the roots of these traditions tracing back to pre-Hispanic cultures (Carlos Zolla, 2022).

Patient satisfaction is attained when the care and attention provided by healthcare personnel meet or exceed the expectations of the patients.

According to a socio-psychological theory regarding the disconfirmation of expectations, "the patient will experience satisfaction when his expectations are met or when the attention and care provided align with or surpass those expectations" (Valls Martínez et al., 2018).

Eindhoven in 2022 assessed the perspectives of athletes referred to chiropractors for the treatment of musculoskeletal injuries, noting high approval ratings for the care received. Factors contributing to a positive experience included effective communication, empathy, dedication, referrals for imaging studies, clarity in the explanation of care during consultations, and collaboration with other members of the healthcare team. (Eindhoven et al., 2022)

A study was conducted involving a population of 1,357 individuals, of which 74% were women, representing various educational levels, races, and socioeconomic backgrounds. Participants completed a questionnaire regarding their experiences with chiropractic care for reported back or neck pain, followed by a three-month follow-up. The findings indicated a positive experience, reflecting significant satisfaction with the health services provided, characterized by high levels of trust and favorable outcomes. Key factors considered included access to care, communication, administrative support, office appearance, and insurance, among other variables (Connor et al., 2021).

Evaluating patient satisfaction with chiropractic care is essential, particularly as it is currently approached in a multidisciplinary manner. It is crucial to assess our standing regarding the care we provide. Furthermore, some scholars assert that a chiropractor should embody the qualities of a competent physician, practice based on scientific evidence, and offer effective communication and emotional support to patients throughout their treatment (Hartvigsen & French, 2020). This research introduces an instrument designed to assess satisfaction with chiropractic care, specifically targeting the Mexican population, incorporating elements from The Chiropractic Satisfaction Questionnaire. This instrument evaluates various aspects, including the quality of care, the chiropractor's technique, and overall satisfaction, among other factors.

Goals

To assess the perceived satisfaction of chiropractic care among workers in the brewing industry.

Specific objectives

- Examine employee satisfaction concerning the doctor-patient relationship.
- Assess employee satisfaction based on the chiropractor's level of professionalism.
- Assess employee satisfaction concerning the efficacy of treatment

Methodology

Cross-sectional, descriptive, observational study utilizing a non-probabilistic sample through a questionnaire. The sample comprises employees from the brewery located in San Juan Bautista Tuxtepec, Oaxaca. Measures of central tendency and percentages were employed for quantitative variables.

Procedure

Informed consent was obtained from the participants to conduct the research, which included a clinical history, posturometry, spinal manipulation, and, in some instances, soft tissue therapy. Subsequently, a Likert-type questionnaire was administered, assigning scores from 0 to 4 corresponding to the responses: totally disagree, disagree, neither agree nor disagree, agree, and totally agree, as conducted by the researchers. This approach was validated by experts, yielding a reliability score of 7.9 according to Cronbach's alpha, encompassing 14 items that assess the following dimensions: doctor-patient relationship (items 1, 2, 3), quality of care (items 4, 5, 6, 7, 9, 11), professionalism (items 8, 10, 12), and treatment efficacy (items 13, 14). This framework was utilized for the percentage evaluation of patient satisfaction levels.

Results

Age	Frequency	Percentage
20-25	2	3.9
26-30	15	29.4
31-35	9	17.6
36-40	6	11.7
41-45	5	9.8
46-50	7	13.7
51-60	7	13.7

The age range spans from 20 to 60 years, with a mode of 27 years and an average age of 49

Sex	Percentage
Masculine	74.5%
Female	25.5%

In the sample, males constituted the majority, with a frequency of 38, representing 74.5%, while females accounted for 13, or 25.4%.

Doctor-Patient Rapport

Items		Answers	
1	Disagree	0	0
	OK	12	23.5
	Neither concur nor dissent	0	0
	I completely concur.	34	66.7
	Completely disagree	5	9.8
2	Disagree	5	9.8
	OK	5	9.8
	Neither concur nor dissent	2	3.9
	I completely concur.	26	51.1
	Completely disagree	13	25.5
3	Disagree	1	2.0
	OK	12	23.5
	Neither concur nor dissent	0	0
	I completely concur.	35	68.6
	Completely disagree	3	5.9

The survey results indicated that acceptable percentages were noted in the items assessing the doctor-patient relationship dimension. However,

in the item concerning kindness, 25% of respondents perceived the treatment as less than acceptable.

Quality of Care

Items		Answers	%
4	Disagree	9	17.6
	OK	10	19.6
	Neither concur nor dissent.	7	13.7
	I completely concur.	23	45.1
	Completely disagree	2	3.9
9	Disagree	1	2.0
	OK	16	31.4
	Neither concur nor dissent.	1	2.0
	I completely concur.	31	60.8
	Completely disagree	2	3.9

5	Disagree	1	2.0
	OK	21	41.2
	Neither concur nor dissent.	1	2.0
	I completely concur.	27	52.9
	Completely disagree	1	2.0
6	Disagree	1	2.0
	OK	20	39.2
	I completely concur.	29	56.9%
	Completely disagree	1	2.0
7	Disagree	11	21.6
	OK	9	17.6
	Neither concur nor dissent.	14	27.5
	I completely concur.	13	25.5
	Completely disagree	4	7.8
11	Disagree	1	2.0
	OK	21	41.2
	Neither concur nor dissent.	1	2.0
	I completely concur.	27	52.9
	Completely disagree	1	2.0

An analysis of the results indicates that the quality of care is deemed acceptable based on the indices presented by the data.

Professionalism

Items	Answers	%	
8	OK	18	35.3
	Neither concur nor dissent.	1	2.0
	I completely concur.	30	58.8
	Neither concur nor dissent.	0	0
	Completely disagree	2	3.9
10	Disagree	6	11.8
	OK	13	25.5
	Neither concur nor dissent.	4	7.8
	I completely concur.	26	51.0
	Completely disagree	2	3.9

12	Disagree	1	2.0
	OK	16	31.4
	I completely concur.	32	62.7
	Completely disagree	2	3.9

In terms of professional care, it has been noted that more than 50% of workers express satisfaction with the professionalism demonstrated in the practice of chiropractic.

Treatment effectiveness

Items	Answers	%	
13	Disagree	13	25.5
	OK	10	19.6
	Neither concur nor dissent.	4	7.8
	I completely concur.	6	11.8
	Completely disagree	18	35.3
14	OK	23	45.0
	Neither concur nor dissent.	6	11.8
	I completely concur.	22	43.1

The effectiveness of the adjustments administered to patients was assessed based on side effects or improvements in symptoms observed immediately following the adjustment. Concerning side effects, the majority of patients reported none (35%), while 25% experienced some form of discomfort.

Concerning the enhancement of patients' symptoms, 45% reported an improvement, while merely 11% lacked a definitive stance on positive or negative aspects. Furthermore, none of the patients reached a negative conclusion.

Sex	%
Masculine	78.49
Female	80.01
Overall mean	79.2

On average, overall satisfaction stood at 79.2% across both genders. In terms of satisfaction by gender, 80% of women reported high satisfaction with chiropractic care, compared to 78% of men.

Conclusions

Patient satisfaction with chiropractic care can be influenced by various factors, primarily the expectations that each patient holds regarding chiropractic treatment. Nevertheless, the results we obtained are encouraging.

Discussion

In a study conducted by Mallard F et al. in 2022, where the predominant symptoms were lower back and neck pain, the satisfaction levels reported by the majority of patients were high, particularly concerning doctor-patient communication and the acceptance of chiropractic care, akin to the findings observed in the current study.

In 2023, Eindhoven et al. conducted a study on athlete satisfaction regarding chiropractic treatment for injuries, revealing a high level of contentment with both the injury care provided through this technique and the doctor-patient relationship.

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