



Arab American University
Faculty of Graduate Studies

**Traditional Eye Care Practices and its
Determinants Factors Among Ophthalmic
Patients in the West Bank**

By
Ragda Mamdouh Ezzat Atawi

Supervisor
Dr. Ahmad Batran

**This thesis was submitted in partial fulfillment of the
requirements for the Master's degree in
Ophthalmic Nursing**

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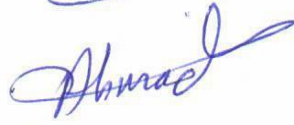


Approval form

Traditional Eye Care Practices and its determinants Factors among ophthalmic Patients in
the West Bank

By:

Ragda Mamdouh Ezzat Atawi

This thesis was defended successfully on 11 August, 2022 and approved by:

Committee Member		Signature
1.	Dr. Ahmad Batran Supervisor	
2.	Co-Supervisor	
3.	Dr. Ahmad Ayed Internal Examiner	
4.	Dr. Jamal Qaddumi External Examiner	

DECLARATION

I declare that the thesis was submitted for a master's degree and has not been submitted to another hospital for a higher degree. The work presented in this thesis is based on my own efforts.

Student Name: Ragda Mamdouh EzzatAtawi

Sign _____

Date _____

DEDICATION

The study is dedicated to my loving parents and my husband, who have always been a source of motivation and inspiration for me, and who have given me the strength and commitment to work with enthusiasm and determination on every task. I dedicate my study to my supervisor and all of my family members as a mark of their support.

ACKNOWLEDGEMENTS

We would like to express here, our warm thanks to the associated professor Dr. Ahmad Batran, who kindly directed this thesis and give us the benefit of the most judicious remarks and advice, for more than two years and to this day.

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Ragda Atawi

ABSTRACT

Background: Traditional eye medicine (TEM) is becoming more widely used across the world. Depending on the drugs used, TEM usage can be considered as harmful or innocuous. Instillation of plant or animal mixtures into the eyeballs is one example. The therapy may induce infection or irreparable blindness in the already injured eye. The majority of prior investigations linked TEM usage to poor visual outcomes in the eye. These issues may make blindness more difficult to bear. The results of the study will be used to educate and teach eye care professionals on the impacts of traditional eye treatment. It will aid authorities in bringing traditional medicine (TM) and the West Bank health system together.

Objectives: The aim of the study was to determine the proportion of traditional eye care practices and associated factors among adult ophthalmic patients attending ophthalmic clinics in the governmental hospitals in the West Bank.

Methods: The study design used is quantitative cross sectional. The researcher employed convenient sampling. A total of three hundred patients participated in the study, every patient coming to the clinic was considered until the sample size of 300 was reached. The data was collected using a structured self-administered questionnaire as a tool. The demographic characteristics included age, gender, the level of education, distance between health facility and home.

Results: the results of the study revealed that 65.7 % of people use TEM. The most symptoms necessitated the use of Traditional eye practice was Inflammatory symptoms of the eye (49.2%), blurred vision (15.7%), and allergic conjunctivitis (10.7%). The most common TEM used was tea (34.0%), followed by herbal products (25.4%) and vegetable slices (potato, cucumber, onion) (14.7%). The most traditional eye treatment

was used by Topical route (92.9%). The majority of prescriber of traditional eye practice was traditional healer (48.7%). Furthermore, the current study found that age, educational level, and residence were predictors of using traditional eye practice among ophthalmic patients attending ophthalmic clinics in selected West Bank hospitals.

Conclusion

The proportion of traditional eye medicine practice was high at 65.7% in the past two years in the West Bank. The predictors of using traditional eye treatment were age, educational level, and resident area. The most common TEM used was tea (34.0%), followed by herbal products (25.4%) and vegetable slices (potato, cucumber, onion) (14.7%).

Keywords: Traditional healer, traditional eye medicine, Traditional medicine, west bank, practice.

ABBREVIATIONS

Abbreviation	Explanation
AAUP	Arab American University Palestine
WHO	World Health Organization
TM	“Traditional medicine”
TH	“Traditional healer”
TEM	“Traditional eye medicine”
SPSS	“Statistical Package for Social Sciences”

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CHAPTER ONE

Introduction

1.1 Introduction

The eye is a sensory structure that reacts to light and receives sensory input from the retina's rod and cone photoreceptor cells to enable light perception and vision, color differentiation, and depth perception (Shah, 2014). Because the eye is so important in one's life, one should do everything possible to keep it functioning properly. Eye care can be obtained from either a private or public practice.

Ophthalmologists, optometrists, ophthalmic nurses, opticians, and ophthalmic assistants are examples of eye care professionals. Most public healthcare facilities have eye clinics that serve their clients' needs. Apart from visiting healthcare facilities to receive professional eye care, people also seek eye care through other means (Achigbu and Achigbu, 2017). As reported by Nwosu and Obidior (2011), such means include using traditional herbal medicines that have not been adequately tested and approved for use; visiting traditional healers or spiritualists; and purchasing medicines from chemical drug sellers without consultation or prescriptions from professional healthcare providers (Gupta, Vashist, Tandon, Gupta, Kalaivani, and Dwivedi, 2017).

Traditional healers provide an awareness of eye diseases and community eye care based on cultural beliefs and practices, especially when patients are hesitant to seek treatment from professional eye care service providers (Habtom, 2018). Some eye care treatments can result in serious ocular complications and vision loss.

Traditional eye care may include the application of substances or mechanical or thermal devices to the eye's surface and adnexa (Eze, Chuka-Okosa, and Uche, 2009).

Among the topical substances used in ocular treatment were "seawater, contaminated water, extracts of roots, leaves, of trees, herbs, vegetables, powdered charcoal, humanurine and saliva, excreta of cattle and lizards, kerosene and petrol" (Eze et al., 2009; Megbelayin, and Babalola, 2015; Ebeigbe, 2013). Many of these, particularly those with high pH or containing specific foreign matter, have the potential to be blinding, while alkaline substances may penetrate and opacify the cornea (Ebeigbe, 2013; Singh, Tyagi, Kumar, Gupta, and Sharma, 2013). Other substances may cause corneal epithelial damage, resulting in ulceration and even perforation (Ukponmwan and Momoh, 2010). The presence of microorganisms in solutions may cause suppurative keratitis, followed by endophthalmitis (Ebeigbe, 2013).

The World Health Organization (WHO) (2013) defines "traditional medicine (TM) as the sum of knowledge, skills, and practices based on theories, beliefs, and experiences indigenous to different cultures, whether explicable or not, used in health maintenance as well as the prevention, diagnosis, improvement, or treatment of physical and mental or social imbalance".

Traditional eye medicine (TEM) refers to biologically based therapies, practices, or partially processed organic or inorganic agents that can be administered via various routes to achieve the desired ocular therapeutic effect (Enitan, 2017). Traditional medicine is increasingly being used to treat eye diseases around the world (Eze, Chuka-Okosa & Uche, 2009). Some 80% of the world's population meets their drug needs with herbal drugs, which supports an estimated 80% of the developing world's population's reliance on herbal medicine (Baylor, 2015). Among the most well-known forms of TEM are herbal extract, honey, breast milk, soil, human saliva, linseed (*Linum usitatissimum*), "damakesie" (*Ocimum* species), potato (*Solanum tuberosum*), and milk

(Munaw et al., 2020; Nyathirombo et al., 2012; Sitotaw, 2018), plant extracts, lemon juice (Tabbara, 1990) and some dried insect bodies (Al-Ghadeer, 2010).

Traditional medicine is still active in rural Saudi Arabia (Al-Ghadeer, 2010), India (Gupta, Vashist, Tandon, Gupta, Kalaivani, & Dwivedi, 2017), and Africa (Munaw, et al.,2020; Nyathirombo, et al., 2012; Sitotaw, 2018). Affordability, low socioeconomic status, and a lack of formal education are the determinants of traditional eye medication use in these communities (Kayoma & Ukponmwan, 2016). Traditional medicine is based on rules of knowledge and practice used to diagnose, prevent, and cure disease. This may be based on past experiences and observations transferred from generation to generation verbally, spiritually by ancestors, frequently in the form of stories, or, in modern times, in writing (Mokgobi, 2014).

Traditional herbal medicine has been linked to a number of ocular symptoms and disorders, including conjunctiva cicatrization, symblepharon formation, obliteration of the fornices and canaliculi, dryness, central corneal thinning, keratinization of the cornea, and corneal epithelial defect. Furthermore, traditional eye medicine can cause corneal edema, ulceration, opacity, and perforation, as well as permanent blindness (Al-Ghadeer & Al-Amry, 2021), and could result in permanent blindness (Rakoma, 2017). As a result, when traditional medicine failed as their first option, a large number of people sought treatment at hospitals (Nyathirombo, Mwesingye & Mwaka, 2012).

1.2 Problem Statement

Traditional eye practices are widely practiced in Palestine and the Arab world. It is thought to be alternative health care and is popular in developing countries. It is a less expensive and more widely available alternative to pharmaceutical drugs. These

treatments may cause irreversible ocular complications, such as blindness (Nyathirombo et al., 2012). The use of harmful traditional eye practices that result in a sudden loss of vision rather than seeking professional eye care at the onset of an eye problem is a major concern. However, there is a paucity of published evidence on traditional eye care practices and the factors that influence them in ophthalmic patients (Azaizeh, Saad, Khalil, & Said, 2006).

Traditional eye care practices are very common in Palestine, where people prefer to use eye care before consulting an ophthalmologist. However, after searching different databases, there are no previous studies conducted on traditional eye care practice in Palestine.

1.3 Significant of the Study

Anecdotal evidence suggests that many people use traditional eye care practices to treat eye-related problems. There is little information available on the traditional eye practices practiced by the Palestinian population. The study's findings will explain why ophthalmic patients resort to these forms of traditional eye care. The study will provide critical information to stakeholders so that they can take appropriate measures to ensure the quality and safety of the practices. The findings of this study will serve as a baseline for researchers as well as a source of information for policymakers and eye health care providers seeking appropriate interventions to reduce the risks associated with traditional eye care practices. Finally, no research on this topic has been conducted in Palestine, and only a few have been conducted globally, so the data gathered would supplement the existing evidence.

1.4. Study Objective

The purpose of the study was to determine the proportion of traditional eye care practices and associated factors among adult ophthalmic patients attending ophthalmicclinics in the governmental hospitals in the West Bank.

1.5. Research Questions

The research questions that are used

1. What is the prevalence of traditional eye care practiced among ophthalmic patientsattending the ophthalmic clinics in selected West Bank hospitals?
2. What are the types of traditional eye practice/treatment used by the ophthalmic patientsattending the ophthalmic clinics in selected West Bank hospitals?
3. What are the predictors of using traditional eye care practice among the ophthalmic patients attending the ophthalmic clinics in selected West Bank hospitals?

1.6. A Study Variables

1.6.1 Independent Variables

Demographic Data: Age, gender, educational level, religion,work, insurance, Income, residence, marital status, availability of traditional healer, Family history of TEM use, knowledge of TEM, Accessibility to reach modern eye care center.

1.6.2 Dependent Variables

Traditional eye care practice.

1.7. Conceptual and Operational Definitions

1.7.1 Conceptual Definitions

Traditional medicine: (TM) defined as “the sum of knowledge, skills, and practices based on theories, beliefs, and experiences indigenous to different cultures, whether explicable or not, used in health maintenance as well as the prevention, diagnosis, improvement, or treatment of physical and mental or social imbalance” (WHO, 2013).

1.7.2 Operational Definition

- **Socio-Demographic characteristics:** It involves Age, gender, marital status, educational level, insurance, work, financial condition, access to eye clinic, religion, family history of TEM use, availability of Traditional Healer, knowledge of TEM use.
- **Type of Traditional eye practice:** Herb extracts, breast milk ,Olive oil, honey, holy water, tea,, vegetables slices (Union /cucumber /potato), or others .

1.8. Conceptual Framework of the Study

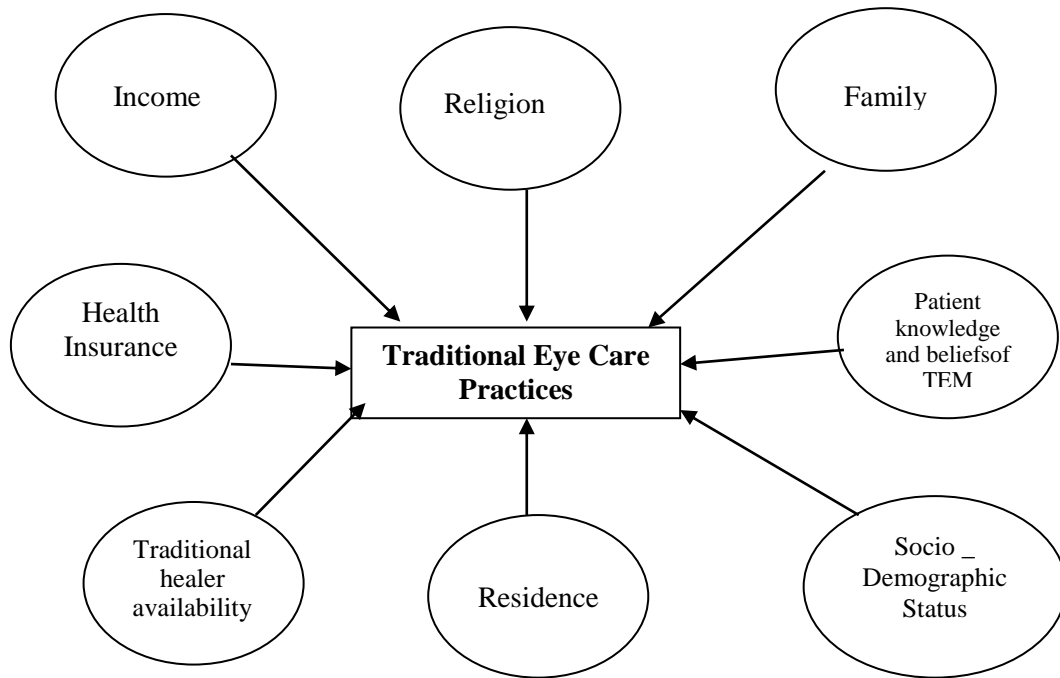


Figure 1: Conceptual Framework of “Traditional Eye Care Practices and its Determinant Factors Among Ophthalmic Patient in West Bank ”.

CHAPTER TWO

Literature Review

2.1 Introduction

This chapter presents the findings of studies on ophthalmic patients' usage of traditional eye care practices. The prevalence of TEM usage, types of TEM administered, ocular effects related with TEM use, and factors related with TEM use are all included in this research review.

2.2 Previous Studies

2.2.1 The Prevalence of TEM Use

The prevalence of TEM has been reported in various studies in Asia and Africa..

Self-medication was reported to be common in a cross-sectional study conducted by Asiedu et al. (2016) in Ghana. The research enrolled 469 of the 500 participants that were chosen, completed a questionnaire, and were included in the study. The result was 25.2% for over-the-counter topical ophthalmic drugs. Self-medication was prevalent in 32.7% of females and 21.5% of males, respectively.

In a facility-based study conducted on new patients seen in the eye unit of the Church of Christ in the Nations (COCIN) Rehabilitation Centre, Mangu, Nigeria, Of the 3,113 consecutive patients who attended the eye unit, the use of traditional eye treatment was reported by 134 (4.3%) participants (Oyediji, Ramyil, Odugbo, & Mpyet, 2019). In a facility-based study on new patients seen in the eye unit of the Church of Christ in the Nations (COCIN) Rehabilitation Centre, Mangu, Nigeria, 134 (4.3 percent) of the 3,113 consecutive patients who attended the eye unit reported using traditional eye treatment (Oyediji, Ramyil, Odugbo, & Mpyet, 2019).

A prospective study was conducted on 189 new patients with corneal ulcers who attended the Gandhi Memorial Hospital's cornea clinic in Rewa, Madhya Pradesh (India). TEM was used by 38% of subjects, with females and subjects living in rural areas being significantly more likely to use it. Farmers constituted the majority of TEM users (51.4%) (Choudhary et al., 2015).

Another population-based study in India was conducted in 25 randomly selected clusters in rural Gurgaon, Haryana, India. 396 (18.2%) of the 2160 participants interviewed reported using ophthalmic medications without consulting an ophthalmologist (Gupta et al., 2017).

In cross-sectional study by Bifari, Alkhalidi, and Almalki (2020) carried out in Taif city, Saudi Arabia to assess the prevalence of self-medication and attitudes and practice regarding the use of TEM for eye-related problems, (431) participants of both genders were included. As a result, the prevalence of self-medication was discovered to be 35%. There was a correlation ($p < 0.001$) between the participants' educational level and their use of medicines without consulting a doctor. As a result of using TEM, approximately 2.9 percent of people experienced eye redness.

2.2.3 Types of TEM Used

Oyediji et al. (2019) conducted a cross-sectional, facility-based study in Nigeria and discovered that plant products such as leaf extracts, roots, and dry leaves were used. Powder, eye pencil, salt solution, and cigarette smoke were among the chemical products reported. Human saliva, human urine, human breast milk, and cow milk were all reported to have been used.

Besides that, Al-Akily, Bamashmus, and El-Gorafi (2019) reported Kohl as the most commonly used traditional eye therapy for allergic eye diseases, visual improvement, and cosmetic purposes in a descriptive study. Another popular traditional remedy for allergic conjunctivitis, corneal ulcers, and vision improvement was natural honey. For painful eyes, squinting, and facial nerve palsy, cautery was used. According to the study, herbal products were mostly used to treat eye infections and corneal ulcers. Ocular pain, blurred vision, and headaches were treated with bloodletting. Couching was once used to treat cataracts. Picking foreign bodies from the conjunctiva sac with a few traditional healers' tongues (tongue picker) was an unusual traditional eye therapy for Yemenis. The majority of participants reported worsening eye conditions, most likely as a result of the toxic effects and unsanitary applications of traditional eye therapy.

Another cross-sectional study was conducted in South Africa by Rakoma et al. (2017) to determine the prevalence of TEM use among patients consulting the Eye Clinic. The study included 100 eye patients, 59 females and 41 males, ranging in age from 10 to 85 years. According to the findings, 57 percent of participants used sugar and water solutions the most for pain relief, while 83 percent of those who used herbal mixtures had poor vision. Anointed tea and water were both used by 75% of those with low vision, sixty percent of the people who had itchy eyes used urine. Breast milk was used by all users to discharge their eyes.

According to the nature of traditional eye medication, Gupta et al. (2017) discovered that 18.2 percent of the 2160 respondents interviewed in rural India reported using ophthalmic drugs without consulting an eye care provider, primarily to manage symptoms such as watering (37.1 percent), redness (27.7 percent), and itching (19.2

percent). The authors discovered that 26.4 percent of the respondents self-medicate based on a physical examination of available eye drops used without a prescription. Expired or unlabeled steroids were used by 26.5 percent and 21.1 percent of respondents, respectively, and 13.2 percent of respondents used indigenous eye drops (Gupta et al., 2017).

2.2.4 Factors Associated with TEM Use

A cross-sectional study was conducted on 600 participants in Gondar, North West Ethiopia, using a pretested structured questionnaire. The findings revealed that 73 (12.2percent) of respondents had used traditional eye medicine in the previous two years, unmarriedness, illiteracy, living in a traditional healer's available area, limited access to modern eye care services, and a positive family history of traditional eye medicine use were all associated with traditional eye medicine practice (Munaw, Assefa, Anbesse, & Mulusew Tegegne, 2020).

In a cross-sectional survey of clients visiting primary eye health centers in Nigeria (HTEMs), Megbelayin and Babalola (2015) found that there was an association between age and health-seeking behavior with the use of harmful traditional eye medications.

In a study to investigate the prevalence of self-medication and attitudes and practices concerning the use of TEM for eye-related problems in Saudi Arabia, Bifari et al. (2020) found a strong association between participants' education status and the use of medication without consulting a physician.

In an Ethiopian study to assess attitude, practice, and associated factors among adult residents, Bantihun (2017) found that variables such as a positive family history of

TEM use and the lack of health insurance were significantly associated with the right attitude toward TEM use. Illiteracy and a positive family history of TEM use were found to be significantly associated with TEM use.

Another cross-sectional study was conducted on 402 participants at Borumeda Hospital in Ethiopia. Results revealed that the proportion of ophthalmic self-medication was 28.6% (95% CI; 24.6–33.3). Age group 29–42 years, lack of health insurance, more than 10-kilometer travel distance to get eye services, previous experience with ocular illness, family or friend experience with ocular illness, availability of ophthalmic medicine bottle/tube at home, and poor knowledge about the hazards of self-medication were all associated with ophthalmic self-medication (Adimassu, Woldetsadik, & Alemu, 2020).

According to the reasons for using traditional eye care practices, qualitative research conducted in Cambodia by Neyhouser, Quinn, Hillgrove, et al. (2018) revealed that women face obstacles to improved eye health, ranging from their values and perceptions of eye health to socio-cultural barriers, economic constraints, and institutional barriers in the household and broader society. According to the researchers, the most significant barriers to women's access to eye health services are a lack of knowledge, fear of surgery and unfavorable outcomes, the cost of receiving eye health services, and limited availability.

The main reasons for using TEM, according to Aurunga et al. (2019), were a lack of customer trust in orthodox medicine, deterioration of the health system, poverty, fear, cultural belief in TEM, traditional healer role, personal circumstances, and ignorance.

Besides this, Okoye, Bell, and Papadopoulos (2018) reported in a qualitative study in Nigeria that the inability to pay eye care service bills and poverty were the most

significant barriers among the Nigerian population. Other barriers included the proximity of rural residents' eye care support centers, fear of financial abuse by service providers, fear of medical prognosis, and other affordable treatment options. Other obstacles identified included the ability to deal with an eye disorder, the severity of the symptoms, and a lack of responsiveness to eye conditions and the resulting risk factors.

Furthermore, a cross-sectional exploratory mixed study conducted in Ghana by Ofosu, Osei, Hagan, Biekro, and Awedoba (2018) found that service affordability (56.6 percent), flexibility (52.1 percent), accessibility (48.2 percent), and service efficiency influenced participants' choice of service form. According to the report, pursuing eye care was associated with a number of variables. This included drug shortages (42.3%), a lack of visiting eye staff (36.7%), and increased eye care costs.

Summary

According to a search of various databases, no studies have been conducted in Palestine to understand these trends. The associated reason for engaging in these practices is a gap in the literature. Furthermore, the prevalence and determinants of traditional eye care practice in Palestine have not been reported. It can be concluded that the quantitative method technique will be of significant benefit in quantifying and understanding the practice of traditional eye care practices. A community-based study would provide a broad avenue for identifying the various eye care practices practiced by natives.

CHAPTER THREE

Methodology

Introduction

The methodology was presented in the following sections; study design, setting, population and sample, study instruments, data collection methods, data analysis, and ethical considerations.

3.1 Study Design

The study used a cross-sectional design to describe traditional eye practices among Palestinians. Because of the nature of the research problem being investigated, this design was chosen. Abramson and Abramson (2000) defined cross-sectional studies as "snapshot" studies because they include a snapshot of the frequencies and related factors of a disease in a population at a given point in time, primarily appropriate to inform health service planning and allocation.

A significant limitation of cross-sectional studies is the difficulty in determining cause-and-effect relationships, which was not the goal of this study. Non-response and selection bias are also issues that affect cross-sectional studies.

3.2 Study Setting

The study was conducted at the ophthalmic clinics of Rafidia and Hugo-Chaves hospitals in the period of the study from April to June 2022. The Hugo Chavez hospital is a governmental ophthalmic hospital located in the village of Turmus'aya near Ramallah, providing advanced eye care and surgery.

The hospital consists of four floors, with an overall area of 7,300 m². Rafidia hospital is a governmental hospital located in Nablus city in the north of the West Bank. It is considered a referral hospital for the northern area. It is composed of an ophthalmic ward for daycare.

3.3 Study Population and Sample

The study population included inhabitants of the West Bank. The research included all adult ophthalmic patients aged over 18 years old who were attending ophthalmic clinics in the Rafedia and Huco-Chaves governmental hospitals in the West Bank. Only the patients who were present at the time that the investigator reached the targeted hospitals were chosen.

The sample size was calculated using the Raosoft program with a confidence level of 95%, margin of error of 5%, and a response rate of 50%. A total sample of 377 participants was needed to conduct this study. An additional 10% of participants will be added to overcome participants' incomplete questionnaires and drop out. So, the final sample will have 417 participants.

3.3.1 Inclusion Criteria

The Inclusion Criteria included:

- a) Patients who are above 18 years.
- b) Adult ophthalmic patients who attend ophthalmic clinics who lived in the west bank at least past years.
- c) Participants willing to participate in the study.

3.3.2 Exclusion Criteria

- a) Patients suffering from severe mental illness or cognitive disorders.
- b) Unconscious and disoriented patients.
- c) Participants who refuse to participate in the study.
- d) Patients who have been complaining about their discomfort or pain during data collection.

3.4 Instrument of the Study

A self-reported questionnaire was developed by the researchers and modified to match the study objectives (Appendix A), the tool composed of demographic data such as age, gender, religion, level of education marital status, occupation, residence, Health insurance, and monthly income. Medical History composed of six questions answered with yes or no. Symptoms necessitated the use of Traditional eye practice/treatment, Types of Traditional eye practice/ treatment used. Route of using the Traditional eye practice/ treatment. Prescriber of Traditional eyepractice/ treatment.

3.5 Validity and Reliability

The content validity of the questionnaire was assessed by an expert panel of five anonymous ophthalmology specialists' background and public health who have been working in the Palestinian health sector for a long period of time. The psychometric reliability of the questionnaire was determined in a pilot study conducted at Rafedia hospital on 15 participants with a history of TEM use and the obtained Cronbach's alphas value was 0.83 for. Following that, the instrument was implemented by rephrasing some items into words familiar to and understandable to the participants.

3.6 Data Collection

After the investigator obtained the ethical approval from Arab American University and Palestinian Ministry of Health, the investigator visited the targeted hospitals. The investigator approached the participant, the participant was greeted, and the investigator introduced himself and the intention of engaging the participant in a conversation. He administered the information document and explained into detail what the study entails. A participant who agreed to be enrolled in the study was given a consent form to sign to participate in the study.

Once consent was received, the questionnaire was administered. A participant code (identification section for each participant) rather than their names was filled into the questionnaire. The questionnaire was administered in a room near the ophthalmic clinic in the targeted hospitals to ensure privacy.

The participants were given sufficient time to provide responses to fill in the questionnaire, and the investigator was available to explain or provide more information on the questionnaire. In the cases of participants that were illiterate, the investigator read out the questions and assisted the participants with the filling of the questionnaire. The investigator administered the questionnaire through a face-to-face interview, the participants completed the questionnaire in the Arabic version. The questionnaire was translated by two independent bilingual translators

3.7 Ethical Consideration

Ethical approval was obtained from Arab American University and Palestinian Ministry of Health. Consent form was provided for every participant prior to the study. Voluntary participation was explained. No names were mentioned or any personal

information about the participant. All data was kept confidential and was used for study purposes only. No any harms of consequences due to participation refusal such as care quality or privileges. Clear explanation was given to each participant about the study objectives and tool, enough time was given for questions.

3.8 Data Analysis

The data were analyzed by using SPSS version 23.0 package software. Frequency and percentage for descriptive data. Multiple logistic regression was used. Differences with $P < .05$ considered statistically significant.

Summary

In this chapter explained how the study was conducted. It covered the study design, population, inclusion and exclusion criteria, sampling, study setting, study period, study tool, data collection, data analysis, ethical considerations, and limitation of the study. The structure of the questionnaire and the technique of collecting data were also explained, this descriptive cross-sectional study was centered on assessing the "traditional eye care practice and its determinant among ophthalmic patient in the west bank".

CHAPTER FOUR

Results

Introduction

This chapter deals with the data collected for analysis. The statistical method allowed the investigator to deduce, analyze, coordinate, measure, evaluate and convey the numerical information. The aim of data analysis is to provide answers to questions about the study. The data analysis strategy comes directly from the question, the design and the data collection process and the level of measurement of the data. This chapter edits, tabulates, analyzes and interprets the data collected.

This chapter expresses the findings concerning to determine the proportion of traditional eye care practices and associated factors among adult ophthalmic patients attending ophthalmic clinics in the governmental hospitals in West Bank. Statistical analyses were directed to explore three research questions:

1. What is the prevalence of the traditional eye care practice among ophthalmic patients attending the ophthalmic Clinics in selected West Bank hospitals?
2. What are the types of Traditional eye practice/ treatment used by the ophthalmic patients attending the ophthalmic Clinics in selected West Bank hospitals?
3. What are the predictors of using the traditional eye care practice among the ophthalmic patients attending the ophthalmic Clinics in selected West Bank hospitals?

4.1 Reliability of the Study Scale

Cronbach's Alpha was calculated for the tool and it was 0.87.

4.2 Response Rate

The participants in the current study composed of all adult ophthalmic patients' age above 18years old whom attending ophthalmic clinics in the Rafedia and Huco-Chaves governmentalhospitals in West Bank, three hundred participants participated in the study (79.6% responserate).

From an organizational point of view the response rate obtained for this research was good;as such the findings should include more reflective details about the ophthalmic patients' population.

4.3 Participants' Characteristics

A total of 300 participants agreed to participate in the study and have completed the questionnaires. Of these, 143 (47.7%) their age above 50 years and 171 (57.0%) were females. The majority of the participants 242(80.7%) are Muslim and 182 (60.7) are married.Also, 87 (29.0%) their level of education are primary school and 109 (36.3%) are housewife.In addition, 153 (51.0 %) their income below 2000 NIS per month as seen in (Table 1).

Table (4-1): Demographic Characteristics of the Participants (N=300)

Characteristics		N	(%)
Age	Less than 30 years	63	21.0
	31-50 years	94	31.3
	Above 50 years	143	47.7
Gender	Male	129	43.0
	Female	171	57.0
Religion	Muslim	242	80.7
	Christian	58	19.3
Level of education	Illiterate	58	19.3
	Primary school	87	29.0
	Secondary school	77	25.7
	Collage and above	78	26.0
Marital status	Single	118	39.3
	Married	182	60.7
Occupation	Employed	33	11.0
	Merchant	24	8.0
	Housewife	109	36.3
	Student	40	13.3
	Farmer	67	22.3
	Other	27	9.0
Average of family income	Below 2000 NIS	153	51.0
	Between (2000 - 4000) NIS	109	36.3
	Above 4000 NIS	38	12.7

According to residence are, the analysis revealed that 196 (65.3%) of the patients are from rural areas, as seen in figure (4-1).

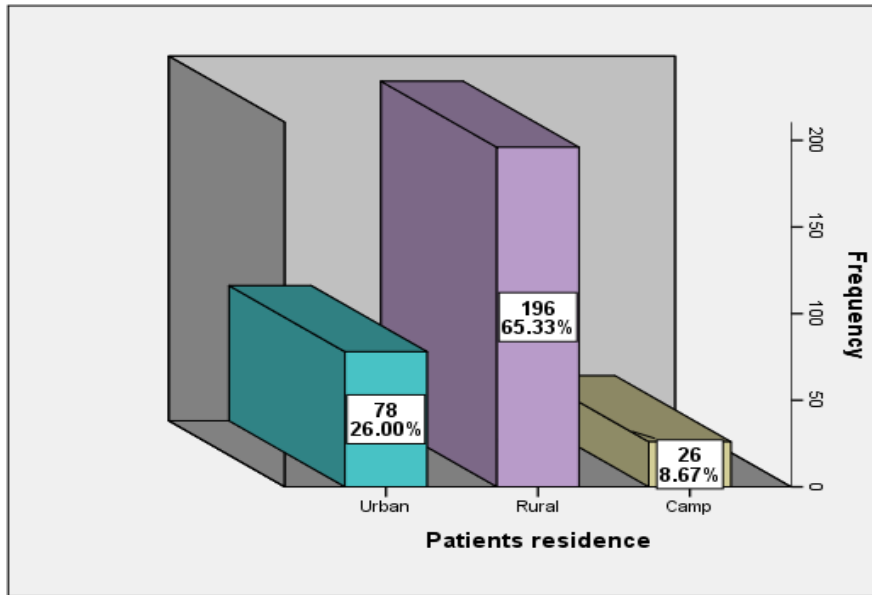


Figure (4-1): Distribution of the participants according to residence (N=300)

Also, the analysis of health insurance revealed that more than half of the participants 160 (53.3%) have health insurance, as seen in figure (4-2).

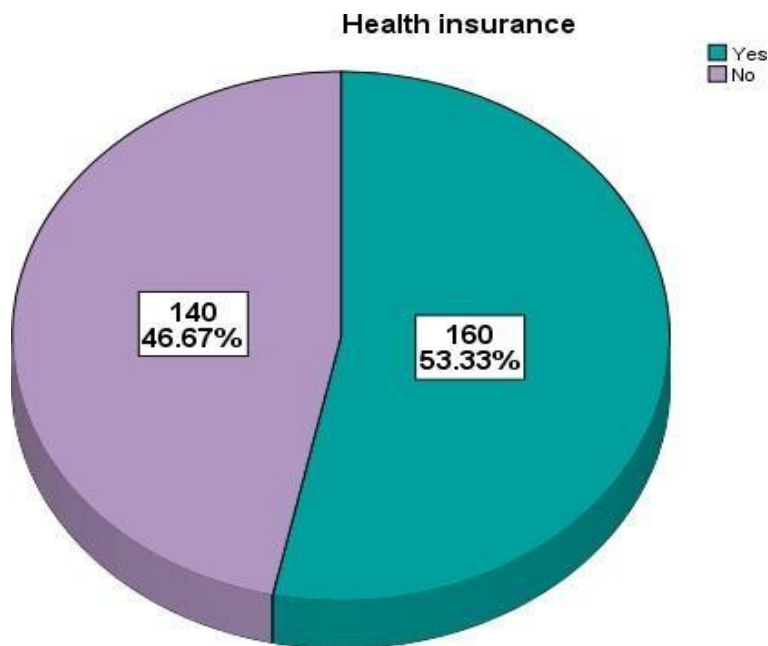


Figure (4-2): Distribution of the participants according to health insurance (N=300)

According to patient's history with eye care, 184 (61.3%) of the participants reported that they haven't the accessibility to reach modern eye clinic or hospital. Also,

207 (69.0%) of the participants reported that there is a traditional healer in their area and 188 (62.7%) of them have family history of traditional eye care practice. Although, 206 (68.7%) of them reported that they haven't knowledge about traditional eye medication 197 (65.7%) have used traditional medication in the past 2 years, as seen in table 4-2.

Table (4-2): Patients History of eye practice (N=300)

Characteristics		N	(%)
Accessibility to reach modern eye clinic or hospital	Yes	116	38.7
	No	184	61.3
Is there a traditional healer in your area?	Yes	207	69.0
	No	93	31.0
Family history of traditional eye care practice	Yes	188	62.7
	No	112	37.3
Do you have knowledge about traditional eye medication?	Yes	94	31.3
	No	206	68.7
Have you used traditional medication in the past 2 years?	Yes	197	65.7
	No	103	34.3

The analysis of the study results revealed that 166 (84.3%) of the participants believed that traditional eye medicine is benefit. Also, 120 (60.9%) of the participants reported that traditional eye practice used for week duration. In addition, 97 (49.2%) of them reported that Inflammatory symptoms of the eye necessitated the use of Traditional eye practice/treatment. The majority of them 183 (92.9%) reported that they used Topical traditional eye practice and 96 (48.7%) of them reported that traditional healer prescribed of Traditional eye practice, as seen in (Table 4-3).

Table (4-3): Traditional Eye Care Practice Among Ophthalmic Patients (N=197)

Characteristics		N	(%)
Is traditional eye medicine benefit?	Yes	166	84.3
	No	31	15.7
Duration of Traditional eye practice/treatment use (years/months/weeks)	Week	120	60.9
	Month	66	33.5
	Years	11	5.6
Which symptom necessitated the use of Traditional eye practice/treatment?	Eye trauma	21	10.7
	Allergic	21	10.7
	conjunctivitis		
	Painful eye	9	4.6
	Blurred vision	31	15.7
	Inflammatory symptoms of the eye	97	49.2
	Other	18	9.1
How did you use the Traditional eye practice/ treatment?	Topical	183	92.9
	Oral	14	7.1
Prescriber of Traditional eye practice/ treatment	Traditional healer	96	48.7
	Clergyman	28	14.2
	Patient	6	3.0
	Relative	24	12.2
	Friend	20	10.2
	Other	23	11.7

Also, the study results analysis revealed that the tea was the most one used for traditional eye practice. One third of the participants 67 (34.0%) used tea as a traditional eyepractice, as seen in Table (4-4).

Table (4-4): Types of The Traditional Eye Care Practice Among Ophthalmic Patients (N=197)

Types of traditional eye practice	N	(%)
Herbal products	50	25.4
Breast human milk	12	6.1
Olive oil	13	6.6
Honey	13	6.6
Holy water (Quran drop, Zamzam water)	12	6.1
Tea	67	34.0
Vegetables slices (potato, cucumber, onion)	29	14.7
Other	1	.5

Logistic regression with enter step showed that among independent variables, age (OR1.41, 95% CI 1.297-4.490), educational level (OR -0.6, 95% CI 0.214-0.742), and residence (OR 1.45, 95% CI 1.311-4.598) were the predictors of using the traditional eye practice among the ophthalmic patients attending the ophthalmic Clinics in selected West Bank hospitals Table (4-5).

Table (4-5): Predictors of Traditional Eye Care Practice

Variable	OR	P. Value	95% C. I.	
			Lower	Upper
Age	2.413	.005	1.297	4.490
Gender	2.100	.079	.919	4.800
Religion	.613	.353	.218	1.723
Educational level	.398	.004	.214	.742
Marital status	1.319	.532	.553	3.143
Occupation	1.056	.686	.812	1.372
Residence	2.455	.005	1.311	4.598
Health Insurance	1.940	.196	.711	5.293
Income/ Month	.595	.134	.302	1.173
Constant	.251	.478		

CHAPTER FIVE

Discussion, Recommendations, and Conclusion

5.1 Introduction

In this chapter, the terms "discussion," "conclusions," and "recommendations" will be explained. The conclusion will be formulated according to the purpose of the study. The purpose of this study was to determine the proportion of traditional eye care practices and associated factors among adult ophthalmic patients attending ophthalmic clinics in the governmental hospitals in the West Bank.

5.2 Prevalence and Predictors of TEM Use

According to the current study's findings, 65.7 % of people use TEM. This finding was supported by Jaya and Masanganise (2014), who found that 61.5 percent of new patients in Zimbabwe had TEM. This result, however, was higher than that of a hospital-based study in the Nigerian population, in which 48.7 percent of patients used TEM (Kayoma & Ukponmwan, 2017). In other hospital-based studies in the same region, the reported prevalence of TEM use was 1.5 percent and 13.2 percent, respectively (Nwosu & Obidior, 2011; Ukponmwan, 2010).

This finding is consistent with findings from a study conducted in Gondar, North West Ethiopia, which discovered that 12.2 percent of people had used traditional eye medicine in the previous two years (Munaw, Assefa, Anbesse, & Mulusew, 2020). In addition, a population-based study in Saudi Arabia found that 35% preferred using traditional eye medications (Bifari et al., 2020), and 38% of patients in India preferred using traditional eye medications (Choudhary et al., 2015). This variation could be explained by differences in the study setting and target population. The second reason

could be due to cultural differences between nationalities.

In a study, tea (34%), herbal products (25.4%), and (14.7 percent) vegetable slices (potato, cucumber, and onion) were the most commonly used traditional eye medicines. Similarly, a Zimbabwean study found that the most common category of TEM used was plants and plant products (Jaya & Masanganise, 2014). According to another study, the most commonly used TEMs were breast milk (40%) and plant products (29%) (Choudhary et al., 2015). In addition, in a facility-based study in North Central Nigeria, the extract from crushedleaves/roots (37.1 percent) that is instilled into the conjunctiva sac was found to be the most commonly used type of traditional eye medicine (Oyediji, Ramyil, Odugbo, & Mpyet, 2019).

Simultaneously, a hospital-based study in Sao Paulo, Brazil, reported the use of homemade, traditional products such as boric acid, normal saline, and herbal infusions for ophthalmic emergencies (Carvalho et al., 2009). A population-based study in India discoveredthat traditional eye medicine (surma/kajal), honey, ghee, rose water, and other plant, dairy, and animal products were commonly used (25.7 percent) in the rural population (Gupta et al., 2017). According to a population-based study in Saudi Arabia, the most commonly used traditional eye treatments were castor oil (49.3 percent), antimony (khohl alethmed) (40.6 percent), chamomile (19.6 percent), and green tea leaves (11.4 percent) (AlSalman, AlHussaini, Khandekar, & Edward, 2021).

In the current study, 48.7 percent of participants consulted traditional healers, 14.2 percent consulted clergymen, and 12.2 percent consulted relatives. These findings were higherthan those of an Indian population-based study, which found that only 8.4 percent of participants sought help for their ophthalmic problems from traditional healers, drug stores, non-registered practitioners, pharmacists, and chemists (Gupta et al., 2017). In

contrast, a Zimbabwean study found that in 95% of cases, the provider of TEM was not a formal traditional healer but rather a relative (Jaya & Masanganise, 2014). Furthermore, Oyediji et al.(2019) discovered that 65.7 percent of traditional eye treatment providers were primarily traditional healers in a facility-based study in North Central Nigeria.

According to the current study, 49.2 percent of participants reported that the most common symptoms necessitating the use of traditional eye care were inflammatory eye symptoms. These findings were in contrast to a hospital-based study conducted in the Zimbabwean population, in which ocular surface inflammation such as tearing (77.4%), redness (74.9%), itchiness (71.6%), and pain (70.3%) were the initial ocular symptoms prior to the use of TEM (Jaya & Masanganise, 2014).

The current study's findings also revealed that traditional eye care was administered as topical 92.9 percent of the time. Similarly, 92.4 percent of TEMs were administered as topical eye drops in Zimbabwe (Jaya & Masanganise, 2014). These findings were in contrast to a study conducted in Nigeria that found 25 percent of patients treating eye conditions gave their medications topically. 12.5% was by incantations only, while 62.5% was by combining both (Jagun, 2014).

The current study found that age, educational level, and residence were predictors of using traditional eye practice among ophthalmic patients attending ophthalmic clinics in selected West Bank hospitals. This finding was consistent with the findings of a study conducted in Ghana, which found that age was significantly associated with TEM use (Enimah, Nirghin, Boadi-Kusi & Ntodie, 2022). Furthermore, in a facility-based study in North Central Nigeria, it was discovered that patients' residence, age, and occupation were all factors in their use of traditional eye medicine (Oyediji et al., 2019). Aghaji et al. (2018) discovered that elderly adults used TEMs

primarily because they were less financially capable than when they were younger. Furthermore, Al-Akily et al. (2019) attributed TEM use to this age group's adequate knowledge of medicinal plants.

A study conducted in southern Nigeria, however, found that the male gender, people from lower socioeconomic classes, and those with no formal education were more likely to use TEM (DH & CU, 2016). Another study in North West Ethiopia discovered that having a positive family history of traditional eye medicine use, being unmarried, being illiterate, having limited access to modern eye care services, and the availability of traditional healers all had a significant association with the practice of traditional eye medicine (Munaw, Assefa, Anbesse, & Mulusew, 2020). These findings could be explained by differences in knowledge and attitudes toward traditional eye medicine use among people of different literacy levels.

Furthermore, financial issues may contribute to traditional eye medicine use because most people with less than a college education have fewer job opportunities and lower pay, which may lead to a preference for traditional eye medicine.

5.3 Recommendations

Based on the findings of the study, the following recommendations were made:

1. There is a need for health education of the general public about the deleterious effects of traditional eye treatment.
2. There is also a need to upgrade primary eye care programs with greater emphasis on eye care during the training of nurses and community health professions.
3. Public awareness and regulatory legislation must be implemented to decrease the harmful effects arising due to such practices.

5.4. Limitations of the Study

The current study has some limitation:

- The current study was geographically limited and does not represent the entire population of Palestine.
- The questionnaire was self-reported questionnaire.
- The study also was based on respondent recall of events from the past weeks, which predisposes the results to recall bias.
- Strike of nurses in the period of study limit the response rate.

5.4 Conclusion

The proportion of traditional eye medicine practice was high at 65.7% in the past two years in the West Bank. The most common TEM used was tea (34.0%), followed by herbal products (25.4%) and vegetable slices (potato, cucumber, onion) (14.7%). The current study found that age, educational level, and residence area were predictors of using traditional eye practice among ophthalmic patients attending ophthalmic clinics in selected West Bank hospitals.

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Appendix A**Arab American University****College of Graduate Studies****Questionnaire****Traditional Eye Care Practices and its Determinants Factors Among
Ophthalmic Patients in the West Bank****Consent Form****Dear participant:**

"I am a master student at the faculty of high studies at Arab American University-Ramallah, kindly invites you to participate in this research study. The study is carried out as part of fulfilling the requirements for master degree in Ophthalmic Nursing."

"This study aims to determine the proportion of Traditional Eye Care Practice and associated factors among adult ophthalmic patients. Your participation is voluntary; your cooperation is highly appreciated. You have the right to withdraw at any time during data collection process without limitation. Filling the questionnaire will not take more than 15 minutes from your time, and assuring that your answers will be kept anonymous and confidential and will be used for the research purposes only".

If you have any further inquiry about the questionnaire, please call Ms. Raga Atari at (0599721133).

Student Name: Ragda Atawi.**Supervised by:** Dr. Ahmad Batran.**Thanks**

Part I: Demographic data

Please circle the appropriate answer on the following Items:

Age (years):

Gender: (a) Male (b) Female

Religion: (a) Muslim (b) Christian

Level of Education: (a) Illiterate (b) Primary (c) Secondary (d) Collage and above

Marital status: a) currently unmarried b) currently married

Occupation: (a) Employed (b) clergyman (c) housewife (d) student
(e) Farmer (f) other

Residence: (a) Urban (b) Rural (c) Camp

Health insurance: (a) Yes (b) NO

Monthly income: (a) less than 2000 NIS (b) 2000-4000 NIS (c) More than4000 NIS

Part II: Medical History		
Accessibility to reach modern eye clinic or hospital:	(a) Yes	(b) No
Is there a traditional healer in your area?	(a) Yes	(b) No
Family history of traditional eye care practice:	(a) Yes	(b) No
Do you have knowledge about traditional eye medication?	(a) Yes	(b) No
Have you used traditional medication in the past 2 years?	(a) Yes	(b) No
Is traditional eye medicine benefit?	(a) Yes	(b) No

Duration of Traditional eye practice/treatment use (years/months/weeks):

Which symptom necessitated the use of Traditional eye practice/treatment?

- a) Eye Trauma
- b) Allergic conjunctivitis
- c) Painful eye
- d) Blurred vision
- e) Inflammatory symptoms (redness, pain, and itching)
- f) Others (specify)

What type of Traditional eye practice/ treatment did you use?

- (A) Herb extracts (b) Breast milk (c) Olive oil
- (d)Honey (e) Holy water (f) Tea
- (g) Vegetables slices (Union /cucumber /potato (h) others

How did you use the Traditional eye practice/ treatment?

- (a) Instilled into the eyes (b)Taken Orally
- (c) Others (specify)

Prescriber of Traditional eye practice/ treatment:

- (a) Traditional Healer
- (b) Clergyman
- (c) Patient
- (d) Relation
- (e) Friend
- (e) Others specify

Thanks

2022-3-29

السادة وزارة الصحة الفلسطينية المحترمين،

تسهيل مهمة بحثية

تحية طيبة وبعد،

تهديكم كلية الدراسات العليا في الجامعة العربية الأمريكية أطيب التحيات، وبالإشارة الى الموضوع أعلاه، تشهد كلية الدراسات العليا في الجامعة أن الطالبة رعدة ممدوح عزت عطوي والتي تحمل الرقم الجامعي 201820321 هي طالبة ماجستير في الجامعة العربية الأمريكية تخصص تمريض عيون، وتعمل على دراسة بحثية بعنوان:

" ممارسات العناية التقليدية بالعين والعوامل المحددة لها لدى مرضى العيون في الضفة الغربية " تحت إشراف الدكتور أحمد البطران، نأمل من حضرتكم الإيعاز لمن يلزم لمساعدتها للحصول على المعلومات اللازمة للدراسة، حيث ستقوم الطالبة بتوزيع الاستبيان على مرضى العيون بعيادة العيون الخارجي في مستشفى رفيديا الحكومي وعيادات العيون الخارجية في مستشفى تشافيز الحكومي. علماً أن المعلومات ستستخدم لغاية البحث فقط وسيتم التعامل معها بغاية السرية، وقد أعطيت هذه الرسالة بناءً على طلبها.

وتفضلوا بقبول فائق الاحترام،،،

عميد كلية الدراسات العليا

د. نوار قطب



State of Palestine
Ministry of Health
General Directorate of Education in
Health and Scientific Research



دولة فلسطين
وزارة الصحة
الإدارة العامة للتعليم الصحي
والبحث العلمي

Ref.:
Date:.....

الرقم: ١٣٥/٢٤٤
التاريخ: ١٤/٤/٢٠٢٠

الأخ مدير عام الادارة العامة للمستشفيات المحترم،،،
تحية واحترام،،،

الموضوع: تسهيل مهمة بحث

يرجى التكرم بتسهيل مهمة الطالبة: رعدة ممدوح عزت عطوي، ماجستير ترميز العيون -
الجامعة العربية الامريكية، لعمل بحث بعنوان:
" ممارسات العناية التقليدية بالعين والعوامل المحددة لها لدى مرضى العيون في الضفة
الغربية"

حيث ستقوم الطالبة بجمع معلومات من خلال تعبئة استبانة من قبل المرضى (بعد اخذ
موافقتهم) ، ذلك في:

- مستشفى رفيديا

- مستشفى هوجو شافيز للعيون

وذلك تحت اشراف د. احمد البطران.

على ان يتم الالتزام بالمحافظة على اخلاقيات البحث العلمي وسرية المعلومات.
على ان يتم الالتزام بجميع تعليمات واجراءات الوقاية والسلامة الصادرة عن وزارة الصحة بخصوص
جائحة كورونا، وتحت طائلة المسؤولية. وابرار شهادة التطعيم قبل دخول مرافق وزارة الصحة.
على ان يتم تزويد الوزارة بنسخة PDF من نتائج البحث، التعهد بعدم النشر لحين الحصول على موافقة
وزارة الصحة.

مع الاحترام،،،



نسخة: عميد كلية الدراسات العليا المحترم/ الجامعة العربية الامريكية

الملخص

ممارسات العناية بالعيون التقليدية والعوامل المحددة لها بين مرضى العيون في الضفة الغربية

الخلفية: أصبح علاج العيون التقليدي مستخدماً على نطاق واسع في جميع أنحاء العالم. اعتماداً على الأدوية المستخدمة، يمكن اعتبار استخدام TEM ضاراً أو غاز ضار، ومن الأمثلة على ذلك تقطير خليط نباتي أو حيواني في مقل العيون. قد يتسبب العلاج في حدوث عدوى أو عمى لا يمكن إصلاحه في العين المصابة بالفعل. ربطت غالبية التحقيقات السابقة استخدام TEM بالنتائج البصرية الضعيفة في العين. قد تجعل هذه القضايا العمى أكثر صعوبة. سيتم استخدام نتائج الدراسة لتثقيف وتعليم أخصائيي العناية بالعيون تأثير العلاج التقليدي للعيون. وسيساعد السلطات في الجمع بين الطب التقليدي والنظام الصحي في الضفة الغربية.

الأهداف: هدفت الدراسة إلى تحديد نسبة ممارسات العناية بالعيون التقليدية والعوامل المرتبطة بها بين مرضى العيون البالغين الذين يترددون على عيادات العيون في المستشفيات الحكومية في الضفة الغربية.

طريقة البحث: تصميم الدراسة المستخدم مقطعي كمي. استخدم الباحث طريقة العينة الملائمة لأخذ العينات. شارك في الدراسة ما مجموعه ثلاثمائة مريض، تم جمع البيانات باستخدام استبيان منظم ذاتياً كأداة. تضمنت الخصائص الديموغرافية العمر والجنس ومستوى التعليم، الحالة الاجتماعية، الدخل الشهري.

النتائج: أظهرت نتائج الدراسة أن 65.7% من الناس يستخدمون TEM أكثر الأعراض التي استدعت استخدام الممارسة التقليدية للعين كانت الأعراض الالتهابية للعين (49.2%)، عدم وضوح الرؤية (15.7%)، والتهاب الملتحمة التحسسي (10.7%). كان الشاي الأكثر استخداماً هو الشاي (30.0%)، يليه المنتجات العشبية (25.4%) وشرائح الخضار (البطاطس، الخيار، البصل) (14.7%) تم استخدام أكثر علاجات العيون تقليدية بالطريقة الموضعية (92.9%). غالبية الواصفين لممارسة العيون التقليدية كانوا معجبين تقليديين (48.7%). علاوة على ذلك، وجدت الدراسة الحالية أن العمر والمستوى التعليمي والإقامة كانت تتنبئ باستخدام ممارسة

العيون التقليدية بين مؤضى العيون الذين يترددون على عيادات العيون في مستشفيات مختارة في الضفة الغربية.

استنتاج

كانت نسبة ممارسة طب العيون التقليدي مرتفعة حيث بلغت (65.7%) في العامين الماضيين في الضفة الغربية. كانت مؤشرات استخدام علاج العيون التقليدي هي العمر، والمستوى التعليمي، والمنطقة المقيمة. كان الشاي الأكثر استخداماً هو الشاي (34.0%)، يليه المنتجات العشبية (25.4%) وشرايح الخضار (البطاطس، الخيار، البصل) (14.7%).

الكلمات المفتاحية: المعالج التقليدي، طب العيون التقليدي، الطب التقليدي، الضفة الغربية، الممارسة.