

ATTITUDE AND BARRIERS TO EVIDENCE BASED PRACTICE IN OPTOMETRY IN PAKISTAN

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ABSTRACT

OBJECTIVE: To evaluate the knowledge and perception of evidence-based clinical practice among Pakistani optometrist and to identify the hurdles in its application.

METHOD: A descriptive cross sectional study was conducted by self-purposed questionnaire among optometrists in Pakistan to evaluate knowledge, perspective, and implementation of evidence based practice and barriers to use of EBP. 139 optometrists having minimum one-year experience completed the proforma regarding evidence-based practice in optometry. This study was conducted between October and December 2020.

RESULTS: 139 optometrists having minimum one year of experience were included in this study. Of those, 129 (88.4%) optometrists had enough knowledge about EBP. 121 (80%) optometrists said they know to search for EBP. 123 (88.4%) were satisfied in their clinical practice. 110 (79.1%) participants said they can handle the patients on their own. Workload (89.2%, n = 124) and budget (85.6%, n =119) were identified as main barrier in practice of EBP. 55 (39.5%) participants said they had full support of hospital higher authorities. 68(48.9%) disagreed that they had support of hospital higher authorities. 127(91.3%) said that workshops/ seminars were beneficial for EBP. 130(93.5%) said seminars should be organized on national level.

CONCLUSION: Optometrist's attitude towards evidence-based practice is generally good. Although there are limitations in implementation of evidence based practice in their daily clinical practice. Main barriers in the implementation of EBP are budget, insufficient time, workload, and limited support of hospital higher authorities. Workshops/seminars are beneficial for EBP and should be organized on national level.

KEY WORDS: Evidence-based practice, Optometry, Healthcare practitioners, Clinical practice.

INTRODUCTION

Evidence-based practice demands that decisions about medical care are depend on the best available, current, sound and applicable proof.^{1,2} These choices should be made by those receiving care educated by the comprehensible knowledge of those giving consideration, with in the perspective on accessible resources.^{1,3} The idea of proof based medicine was first referred in the journal of the American Medical Association in 1992.^{4,5} The article proposed another model that clinicians should learn new expertise in looking and

finding the best accessible clinical research proof and execute the discoveries into their practice.⁵ Evidence-based practice (EBP) is wellbeing where knowledge of scientific proof and best practices are balanced with information of patient's values and preferences. In this care, the patient feels acknowledged, where conceivable and attainable, can effectively participate in the care process. The issue is that the literature does not describe how patient preferences should be acknowledged in EBP.⁶

Proof based practice (EBP) is a significant factor in quality, patient centered wellbeing care.^{1,7} This meaning of EBP requires three elements in making clinical choice:

1. The best external proof.
2. The skills of every clinician.
3. Patient's preferences.⁸

Practitioners have coined the acronyms (PICO) which helps in their clinical analysis where:

- P represents patient/population of interest.
- I represent the intervention, treatment, or diagnostic procedure.
- comparison or control group.
- O is the outcome of interest.⁸

Optometry is a medical care profession that is independent, educated, and regulated (licensed/registered) and optometrist are the essential medical care practitioners of the eye and visual framework who give comprehensive eye and vision care, which includes refraction and dispensing, recognition/findings and management of disease in the eye, and the restoration of states of visual framework.^{7,9} An optometrist is often the first contact for the patient in routine practice of ophthalmology. In addition to giving eye and vision care, optometrist assume a significant part in a person's overall health and well-being by identifying fundamental diseases such as diabetes and hypertension.⁹ The optometry profession has created to bring essential eye care at a local area level across the nation.^{7,10} Evidence-based practice (EBP) model in optometry recommend basic treatment decisions on the best available scientific evidence as passed through clinical expertise in accordance with the patient values and preferences.¹¹

Both Institute of Medicine (IOM) and the American Physiological Association (APA) evidence-based practice model recommend basic treatment

decision on the best available scientific evidence in accordance with the value and preferences of patients through medical expertise.⁶ In two systemic reviews investigating individual characteristic, it is reported that the most important characteristic affecting the use of research is "attitude display towards research". Therefore, in order to develop effective evidence-based strategies, it is important to know optometrist attitude towards relevant issues. There has been an awareness of EBP within optometry for many years, although barriers remain to the implementation of EBP in optometry education.^{4,12}

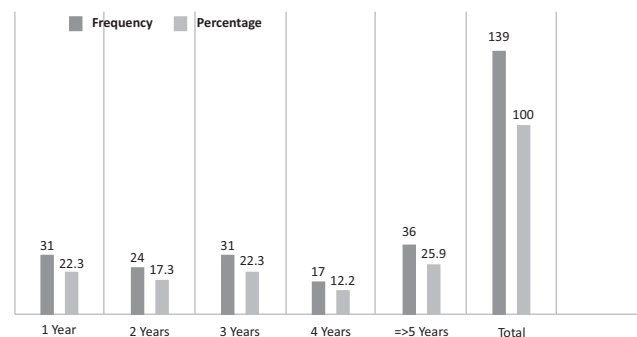
MATERIALS AND METHODS

A descriptive cross sectional study was conducted through self-purposed questionnaire distributed among Pakistani optometrist to evaluate knowledge, perception, and attitude towards EBP and the barriers in the implementation of EBP. Total of 139 optometrists, having minimum one-year experience, completed this survey. Qualitative data was documented as frequency and percentage. The research was approved by ethical board of College of Ophthalmology and Allied vision sciences. The participants who fulfilled the inclusion and exclusion criteria were included in this study. This study was conducted between Septembers to December 2020.

RESULTS

139 optometrists having minimum one year of experience were included in this study (figure 01)

Figure -1: Experience



129 (88.4%) optometrists had enough knowledge about EBP and 7(5%) had no knowledge about EBP. 121 (80%) optometrists said they know how to search for EBP. 123 (88.4%) were satisfied in their clinical practice. 110 (79.1%) participants said they can handle the patients on their own (Table 01).

Table -1: Attitude of Optometrists

	STRONGLY AGREE	AGREE	NOT SURE	DISAGREE	STRONGLY DISAGREE
Knowledge of EBP	36 (25.9%)	87 (62.6%)	9 (6.5%)	4 (2.9%)	3 (2.2%)
How to search for EBP?	27 (19.4%)	94 (67.6%)	12 (8.6%)	3 (2.2%)	3 (2.2%)
Onsite facilities are adequate for searching	15 (10.8%)	91 (65.5%)	18 (12.9%)	12 (8.6%)	3 (2.2%)
Available research is of poor quality	4 (2.9%)	41 (29.5%)	41 (29.5%)	48 (34.5%)	5 (3.6%)
Benefits to change practice based on research	17 (12.2%)	102 (73.4%)	13 (9.4%)	4 (2.9%)	3 (2.2%)
Available research in my field is not relevant to my professional practice	7 (5.0%)	36 (25.9%)	14 (10.1%)	67 (48.2%)	15 (10.8%)
Hard to influence changes to clinical practice in work environment	11 (7.9%)	57 (41.0%)	27 (19.4%)	35 (25.2%)	9 (6.5%)
Satisfied in clinical practice	29 (20.9%)	94 (67.6%)	9 (6.5%)	5 (3.6%)	2 (1.4%)
Optometrist can tackle the patient on their own	31 (22.3%)	79 (56.8%)	8 (5.8%)	16 (11.5%)	5 (3.6%)
Workshop/seminars are beneficial for EBP	64 (46.0%)	63 (45.3%)	9 (6.5%)	1 (0.7%)	2 (1.4%)
Optometry is independent profession	92 (66.2%)	33 (23.7%)	5 (3.6%)	3 (2.2%)	6 (4.3%)

Number of barriers was identified in the implementation of EBP. Workload, budget, insufficient time, limited support of government hospital higher authorities - one hundred and twenty four (89.2%), one hundred and nineteen (85.6%), one hundred and four (74.8%), and sixty eight (48.9%) respectively (Table 02).

Table -2: Barriers in EBP

	STRONGLY AGREE	AGREE	NOT SURE	DISAGREE	STRONGLY DISAGREE
Workload	48 (34.5%)	76 (54.7%)	11 (7.9%)	3 (2.2%)	1 (0.7%)
Budget	57 (41.0%)	62 (44.6%)	17 (12.2%)	3 (2.2%)	0 (0.0%)
Support of Hospital higher Authorities in Govt.Institute	13 (9.4%)	42 (30.2%)	16 (11.5%)	50 (36.0%)	18 (12.9%)
Insufficient time	19 (13.7%)	85 (61.2%)	22 (15.8%)	10 (7.2%)	3 (2.2%)
Patient compliance	27 (19.4%)	95 (68.3%)	12 (8.6%)	3 (2.2%)	2 (1.4%)
Research is not easily understood	14 (10.1%)	84 (60.4%)	9 (6.5%)	30 (21.6%)	2 (1.4%)
Difficult to access nearest Library	23 (16.5%)	78 (56.1%)	7 (5.0%)	27 (19.4%)	4 (2.9%)

One hundred and twenty seven (91.3%) said workshops/seminars are beneficial for EBP. One hundred and thirty (93.5%) said seminars should be organized on national level (Table 01).

DISCUSSION

Evidence-based practice is a process in which clinician provide the most effective care that is current, authentic and relevant evidence for the patient better outcomes according to patient preferences.¹³

Evidence based practice is helpful in clinicians including optometrists in their daily practice to provide care to their patients.'¹⁴ EBP has been implementing since 1990s but barriers in the implementation of EBP remains constant. This study includes total 139 optometrists. Out of 139, 31 (22.3%) participants reported that they had experience of one year. 24 (17.3%) had two years of experience. 31 (22.3%) had three, 17 (12.2%) had four and 36 (25.9%) had five or more than five years of experience. In 2019 a study was conducted among optometrists of Saudi Arabia. 114 optometrists were included in this study out of them 62% were male and 38% were females. This study reported that Saudi optometrists use research that is not latest.¹⁵

Evidence-based practice becomes effective if we know the evidence-based searching. In this study almost maximum optometrist 121(87.0%) can search for EBP and 126(90.6%) were confident in using computer for evidence based searching. Similarly, another study was conducted on the availability of IT in the field of evidence based practice so that health care professional provides latest and authentic evidence.¹⁶ In this study 106 (76.2%) optometrists said their onsite computer facilities are adequate for searching. 53 (38.1%) disagreed that available research specific to their work is of poor quality and about 41 (29.5%) were unaware of quality of research. 98(70.5) optometrists think that research is not easily understood. This may be the barrier in application

of evidence-based practice in their daily clinical practice. 115 (82.7%) optometrists were confident in their abilities to interpret the available research. There are benefits to change clinical practice based on research. It decreases the risk factors increased patient better outcomes. It also helps in the management of time.

In 2015 a study was conducted in Australia and Saudi Arabia to assess optometrist's perception regarding knowledge of EBP. Most participants show positive response to EBP, barriers in application of EBP included insufficient time and insufficient access to time.³ While in this study optometrists had enough knowledge about EBP, barriers including 101 (72.6%) participants said difficult to access knowledge is a major barrier in EBP, patient compliance 122 (87.7%), workload 124(89.2%), insufficient time 104(74.8%), limited support of hospital higher authorities 55(39.5%), budget 119(85.6%).

This study shows that much of the available research is related to profession. 58.9%. Most of the practitioners discuss research findings with their knowledgeable colleagues 74 (53.2%). 68 (48.9%) said it is hard to influence changes to clinical practice based on evidence in their clinical setups. Mostly optometrists 123(88.4%) were satisfied in their clinical practice but time limitation prevents use of EBP effectively in work environment. In 2013 a study was conducted in Australia concluded that participants liked clinical optometry because of social element like helping people, friendly environment with their patients. While few participants observed their work difficult.^{17,18} Patient preference is the first priority associated with client fidelity but other factors also affecting the optometric practice.¹⁹

According to 125(89.9%) participant's optometry is independent and self-regulated profession. 110(79.1%) said an optometrist can tackle the patient on their own and they have enough skills for evidence-based practice. In India optometry is a

health care profession who work with ophthalmologist to provide eye care services.²⁰ In UK optometrists perform their practice independently in limited facilities.^{18,17,21} The study 127(91.3%) agreed that evidence-based practice workshops are beneficial for optometrists and should be organized on national level. This strategy could increase the knowledge about EBP among optometrists who are unaware of evidence-based practice. Best evidence based practice leads to save time, save energy thus decrease the burden on optometrists and result in better patient outcomes. Evidence based practice is necessary for the timely examination of patients presented with eye problems. This can reduce the wastage of time and unnecessary referrals to hospitals.

CONCLUSION

This descriptive cross-sectional study on "Attitude and barriers to evidence-based practice in Optometry in Pakistan" concludes that optometrist's attitude toward evidence-based practice is generally positive even though there are limitations in application of EBP in their daily clinical practice. Main barriers in the implementations of EBP are budget, insufficient time, work load and limited support of government hospitals higher authorities. Workshops/ seminars are beneficial for EBP and should be organized on national level in Pakistan. It is also concluded that optometrists can tackle the patients by their own and optometry is an independent and self-regulated profession.

RECOMMENDATION

After this study it is recommended that Seminars/workshops about EBP should be organized on national level. There should be full support of hospital higher authorities. Institutions should give proper infrastructure to the optometrists. There should be proper libraries for evidence-based searching. Bring the standard of optometry to the main international standard in Pakistan. Optometrist's clinical skills can be

improved by providing professional environment and cooperation.

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