

Study on Assess Knowledge, Attitude and Perceived
Barriers Towards Evidence Based Practice Among the
Health Professionals in Dahod

By

Anurag Sanadhya

*Dissertation submitted in partial fulfillment of the requirements of the degree
MBA Hospital and Health Management*

Academic year, 2017-2019



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TO WHOMSOEVER MAY CONCERN

This is to certify that Dr. Anurag Sanadhya, student of MBA Hospital and Health Management from The IIHMR University, Jaipur has undergone internship training at National Health Mission, Gujarat from 8th February 2019 to 11th May 2019.

The Candidate has successfully carried out the study assigned to him during internship training and his approach to the study has been sincere, scientific and analytical.

The Internship is in fulfillment of the course requirements.

I wish him all success in all his future endeavors.

A handwritten signature in blue ink, appearing to read 'Ashok'.

(Col) Dr. Ashok Kaushik

Dean, Academics and Student Affairs

The IIHMR University, Jaipur

16 May 2019.

A handwritten signature in blue ink, appearing to read 'Anoop'.

Dr. Anoop Khanna

Professor

The IIHMR University, Jaipur



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The Certificate is awarded to

Dr. Anurag sanadhya

In recognition of having successfully completed her dissertation in the department of

Name of the department: Health and Family welfare

and has successfully completed her project on

Title of the project : *"A study to assess knowledge, attitude and perceived barriers towards evidence based concept among the health professionals in Dahod."*

Duration of study:-8th February to 11th May 2019

Organization:-National Health Mission, Gujarat Dept.

She comes across as a committed, sincere and diligent person who has a strong drive and zeal for learning

We wish her all the best for future endeavors


Additional District Health Officer
District Panchayat, Dahod

Dr. R.R. Parmar
Additional District Health Officer
Dahod

Acknowledgement

The success of any task would be incomplete without the expression the gratitude to the people who made it possible. Hereby I take this opportunity to express my deep sense of gratitude to all this who have been instrumental in successful completion of my dissertation in Health department, District Panchayat Dahod , NHM Gujarat

At the onset of my report, I would like to acknowledge my sincere thanks to my institute, Institute of Health Management and Research Jaipur for providing me a platform to gain enough knowledge and skills in different aspects of health management and NHM Gujarat for believing me on my abilities.

I would like to express my gratitude to Dr.S.N.GOSAI , Chief District Health Officer, Dahod and Dr. R.R. PARMAR, Additional District Health Officer, Dahod who have shown faith on me and helped me at various stages of my project.

I express my gratitude and respectful regards to my Guide Dr.Anoop Khanna, Professor, IIHMR University jaipur, for his able guidance and useful suggestions, which helped me in completing the project work.

I would also like to thanks to my faculty members wit out whom this project would have distance reality.

Finally, and most importantly, I would like to thank my family for their blessings and my seniors and colleagues for their help and wishes for the successful completion of this training.

Dr Anurag sanadhya
MBA-Hospital and Health Management
IIHMR University, jaipur



Government of Gujarat

Vision

“The National Health Mission (NHM) is a National effort at ensuring effective healthcare through a range of interventions at individual, household, community, and most critically at the health system levels”.

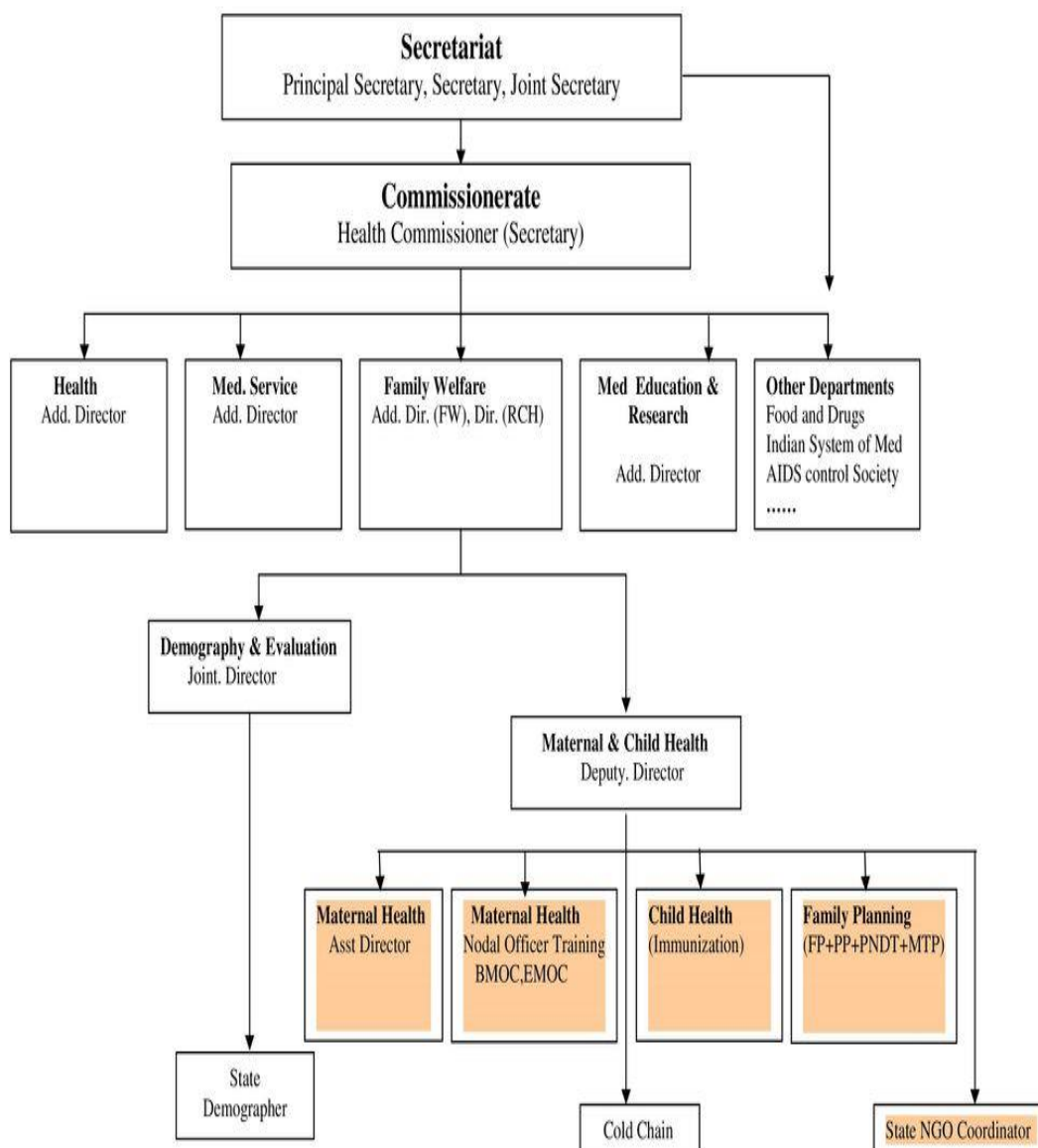
The **National Health Mission** (NHM), at the state level, a State Health Mission headed by the Chief Minister has been constituted with similar composition, as that of the national steering group. State Health Mission's role includes the following:

1. Actively undertake policy and institutional reforms to enable effective implementation of NRHM.
2. State level planning, implementation and monitoring.
3. Support District level planning, implementation and monitoring.
4. Provide training support to districts.
5. Coordination across relevant departments.
6. Sharing of experiences across districts.
7. Management of cash flows.
8. Financial accounting/ administration.

Core Values:

- Safeguard the health of the poor, vulnerable and disadvantaged, and move towards a right based approach to health through entitlements and service guarantees
- Strengthen public health systems as a basis for universal access and social protection against the rising costs of health care.
- Build environment of trust between people and providers of health services.
- Empower community to become active participants in the process of attainment of highest possible levels of health.
- Institutionalize transparency and accountability in all processes and mechanisms.
- Improve efficiency to optimize use of available resources.

Department of Health & Family Welfare: Govt. of Gujarat



Health Profile of District:

- **Brief Introduction:**
- **Dahod** is a Big city on the banks of the Dudhimati River in Dahod District in the State of Gujarat, India. It is said that it has taken its name from Saint Dadhichi, who had an Ashram on the bank of Dudhumati river. The city serves as District Headquarters for Dahod District. It is 214 kilometres (133 mi) from Ahmedabad and 159 kilometres (99 mi) from Vadodara. It is also known as *Dohad*(meaning "two boundaries", as the borders of the states of Rajasthan and Madhya Pradesh are nearby).^[2]
- Dahod has been selected as one of the hundred Indian cities to be developed as a smart city under Prime Minister Narendra Modi's flagship Smart Cities Mission.
- **Establishment:**
- The district consists of eight blocks namely: Limkheda, Garbada, Zalod Fatepura,Dahod, Sanjeli, Dhanpur, Dev. Baria. The district headquarters is located at Dahod
- **Demography**
 - **Sex Ratio of Dahod : 987**
 - **Literacy Rate: 83.57%**
 - **Total Area:**
 - **Population: 21,26,558 (2011 census)**

ABSTRACT

Introduction:- Recent studies had shown that there is in fact an inverse relationship between the number of years of practice and the quality of care provided, this is because the ‘toolkit’ created during training is not updated regularly, practicing innovations that involve theoretical shifts may be harder to incorporate into the practice who had been trained a long time ago. Evidence-based health care is the conscientious use of current best evidence in making decisions about the care of individual patients or the delivery of health services.

Objective:-

- To assess the knowledge towards evidence based concept among the health professionals
- To assess the attitude towards evidence based concept among the health professionals
- To check the barriers towards evidence based concept among health professionals.

Methodology:- Cross sectional study

As the study aims to analyze present level of attitude and perception among health care professionals towards Evidence Based Practice. The study comprise of the sample selected from the health care directory of registered medical, dental and physiotherapy professionals in Dahod. The total number of health care professionals included in this study is 300. Structured questionnaire were used which were comprise of four parts contains socio- demographic sheet, knowledge awareness questions and their attitude and perceived barriers towards evidence based practice.

Conclusion :- In this study it is found that lack of time and work load is perceived barriers among and so, the professionals does not show much interested in the evidence based practice. However it is required to formulate some strategies to implement the evidence based practice. Management levels have to be involved in linking research evidence to work-flow in a way that does not adversely affect productivity and flow of patients. They need to create strategies for this through collaboration, incorporating all clinical disciplines. By doing so it would make evidence-based practice easy to access, time efficient and relevant to clinical practice need.

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Chapter 1

Introduction

Background of the study

It is generally accepted that the more experience a physician possess, better the quality of health care delivery. However recent studies had shown that there is in fact an inverse relationship between the number of years of practice and the quality of care provided, this is because the 'toolkit' created during training is not updated regularly, practicing innovations that involve theoretical shifts may be harder to incorporate into the practice who had been trained a long time ago.¹ Changing socio-economic patterns, knowledgeable health care consumers, rapid technical advances and the information 'explosion' all place greater demands on clinical decision making.¹

Evidence-based health care is the conscientious use of current best evidence in making decisions about the care of individual patients or the delivery of health services. Current best evidence is up-to-date information from relevant, valid research about the effects of different forms of health care, the potential for harm from exposure to particular agents, the accuracy of diagnostic tests, and the predictive power of prognostic factors. It involves integrating individual expertise with the best available external evidence and use of individual patient values and preferences in making decisions about effective patient care.²

Evidence based practice is said to be the current best approach to provide interventions, the advantages of evidence based practice are that they were scientifically proven to be safe, efficient and cost-effective (e.g. recommendations from systematic reviews).¹

Evidence Based Practice is increasingly more important in healthcare and many professionals value its implementation.

Statement of The Problem

1. Several barriers continue to exist. Two barriers reported by healthcare practitioners are lack of confidence and lack of knowledge related to EBP application. ³
2. Identification of the factors influencing Knowledge, Awareness and Practice of the healthcare professionals.
3. The identification of the barriers will help in understanding how evidence based healthcare can be implemented and encouraged among the healthcare professionals

Objectives of the Study:

- To assess the knowledge towards evidence based practice among the health professionals
 - To assess the attitude towards evidence based practice among the health professionals
 - To check the barriers towards evidence based practice among health professionals.
-

Significance of the study

Evidence based practice is the best approach to provide interventions; the benefits of evidence based practice are be safe, efficient and cost-effective. Its importance in medical field is significant. And still there are some barriers such as lack of awareness and lack of confidence and knowledge about EBP. It is require to be aware and to have knowledge regarding evidence based practices among medical, dental and physiotherapy professionals to make the health care field to improve the quality and cost effectiveness.

Scope and limitation of the study

Study limited to the healthcare professionals registered in that directory and time is of 2 months only limited to Dahod can be expanded including nurses, health workers, Pharmacist also.

Chapter 2

Review of Literature:

AshriN atal(2016) physicians and dentists had an overall encouraging attitude towards EBP, with 85% showing interest in the current promotion of this process and 97% agreeing that it improves patients care. No significant differences were found between dentist and physicians with respect to all attitude items⁴

HaronMIetal(2011) while 60.9% of the group acknowledged that they practice EBD most of the time fewer (40.8%) had reasonable understanding of EBD. Clinical decisions appear to be mostly based on the clinicians shown judgemental (73.3%) rather than no evidence based sources such as Pubmed(28.3%) other CochranellLibrary(6.7%). The mean EBD knowledge score for the group being a above the mean. Training EBD was perceived essentially by a majority of the group⁵

Rice K, Hwang J, Abrefa-Gyan T, PowellK (2010) ⁷ examined the psychometric properties of the Evidence-Based Practice Questionnaire (EBPQ). The 24-item EBPQ was developed to measure health professionals' attitudes toward, knowledge of, and use of evidence-based practice (EBP). A confirmatory factor analysis was performed on the EBPQ given to a random sample of National Association of Social Work members (N = 167). The coefficient alpha of the EBPQ was .93. The study supported a 23-item 3-factor model with acceptable model fit indices ($\chi^2 = 469.04$; RMSEA = .081; SRMR = .068; CFI = .900). This study suggests a slightly modified EBPQ may be a useful tool to assess social workers' attitudes toward, knowledge of, and use of EBP.

Al Omari M, Khader Y, Jadallah K, Dauod AS, Al-Shdifat AA(2009) ⁶ conducted a study to assess the awareness, attitude and knowledge towards evidence-based medicine (EBM) among primary health care doctors in Jordan and to identify the perceived barriers for practising EBM. A simple random sample of 34 comprehensive primary health care centres was selected from a list of 64 centres in Jordan using random number table. A family doctor visited all selected centres and invited the available doctors to participate in the study. Participants were asked to fill the self-administrated questionnaire that was designed to assess beliefs and attitude of doctors towards EBM. Results showed about 80.7% welcomed promotion of EBM and 91.1% agreed on that research findings are helpful in daily management of patients. About 85.1% stated that practising EBM improves patient care, 68.3% stated that EBM

Reduces health care costs, 74.8% stated that EBM improves quick knowledge update, 93.6% reported that the doctor-patient relationship is affected positively by practicing EBM. The authors concluded that in spite of the positive attitude towards EBM, this study demonstrated numerous personal, interpersonal and institutional barriers towards implementing EBM which necessitate prompt action to formulate a national plan to overcome such barrier.⁶

Chapter 3

Theoretical/conceptual /operational frame work

Introduction

Evidence-based medicine (EBM) is an approach to medical practice intended to optimize decision-making by emphasizing the use of evidence from well-designed and well-conducted research. Although all medicine based on science has some degree of empirical support, EBM goes further, classifying evidence by its epistemological strength and requiring that only the strongest types (coming from meta-analyses, systematic reviews, and randomized controlled trials) can yield strong recommendations; weaker types (such as from case-control studies) can yield only weak recommendations. The term was originally used to describe an approach to teaching the practice of medicine and improving decisions by individual physicians about individual patients.^[1] Use of the term rapidly expanded to include a previously described approach that emphasized the use of evidence in the design of guidelines and policies that apply to groups of patients and populations ("evidence-based practice policies").^[2] It has subsequently spread to describe an approach to decision-making that is used at virtually every level of health care as well as other fields (evidence-based practice).

Whether applied to medical education, decisions about individuals, guidelines and policies applied to populations, or administration of health services in general, evidence-based medicine advocates that to the greatest extent possible, decisions and policies should be based on evidence, not just the beliefs of practitioners, experts, or administrators. It thus tries to assure that a clinician's opinion, which may be limited by knowledge gaps or biases, is supplemented with all available knowledge from the scientific literature so that best practice can be determined and applied. It promotes the use of formal, explicit methods to analyze evidence and makes it available to decision makers. It promotes programs to teach the methods to medical students, practitioners, and policy makers.

There is a discrepancy between the amount of research evidence that exists and the use of this evidence within clinical health care practice

Evidence-based medicine (EBM) is the process of systematically reviewing, appraising and using clinical research findings to aid the delivery of optimum clinical care to patients. The need to apply EBM and to develop EBM guidelines and performance indicators for the

management of commonly encountered problems in general practice and primary care has been detailed in several papers. Some surveys have concluded, however, that the best available evidences seldom used when making clinical decisions. A review of physicians' performance suggested that learning how to practice EBM, seeking out and applying the findings of EBM summaries and adopting evidence-based practice protocols developed by respected colleagues can keep us aware of medical advances and help to enhance our clinical performance. EBM practice also supports decision-making shared with users, which is already favored within the medical community as the ideal of decision-making,

This study was planned to assess knowledge, attitude and barriers towards evidence based concept among the health professionals (medical , dental, physiotherapy) and relate it with these three specialties with each other

Various parameters affecting the evidence based practice in health care

The study aimed to analyze the level of knowledge, attitude and perceived barriers amongst the various health professionals belonging to medical, dental and physiotherapy field. These were analyzed using a close ended structured questionnaire that comprised of four parts:

1. Socio-demographic data including
 - Age of the participants
 - Gender of the participants
 - Years of experience
 - Specialty (Medical, Dental, Physiotherapy) of the participants
2. Knowledge of the healthcare professionals on the evidence based healthcare practice
3. Attitude of the healthcare professionals on the evidence based healthcare practice
4. Perceived barriers of the healthcare professionals on the evidence based healthcare

CONCEPTUAL FRAMEWORK

1. Independent variables:

- Socio-demographic factors- Age, Gender
- Year of Experience in the health care field
- Specialty in the field which includes Medical, Dental, Physiotherapy.

2. Dependent variables

- Knowledge about the evidence based practice
- Attitude towards the evidence based practice
- Perceived barriers towards the evidence based practice

Operational framework

Dependent variables:- in this study to assess the knowledge , attitude and perceived barriers structured statements were being used to identify the knowledge, to assess the attitude and perceived barriers among Medical, Dental and Physiotherapy professionals.

In knowledge assessment of the healthcare professionals structure questionnaires were used. According to the correct answers from the respondents marks were given out of 10. For every right answer the respondents were given 1 mark. Questions were included regarding confidence interval, review literature, meta-analysis, specificity and sensitivity, bias and systemic review.

For the attitude assessment towards Evidence Based practice the statements were added and likert scale were used to measure the parameters. Same for the perceived barriers towards Evidence Based practice the statements were added and likert scale were used to measure the parameters. In which five parameters were added to measure the statements which are as follows:

- Strongly agree
- Agree
- Uncertain
- Disagree
- Strongly disagree

According to likert scale parameters we have analyzed our data through the different test. For the knowledge score assessment it was analyzed through previously set standards which are:

- 100% outstanding
- >85% excellent
- 70 -85% good
- 55-70%average
- <55% poor

Independent variables

- Socio-demographic characteristics consists of
- Age of respondents,
- Name of respondents,
- Gender of the respondents,
- Year of experience of the respondents,
- Specialty of respondents.(Medical, Dental,Physiotherapy)
- The Age referred to the age of respondents.
- The Gender referred to the sex characteristics of the patients as male and female.
- Specialty in which we have included Medical, Dental and physiotherapy.

In this study we aim to compare the specialty of the respondents with their knowledge score, their attitude and barriers they perceived in evidence based practice.

Chapter 4

Research methodology

Research Design:- Cross sectional study

As the study aims to analyze present level of attitude and perception among health care professionals towards Evidence Based Practice. The study comprise of the sample selected from the health care directory of registered medical, dental and physiotherapy professionals in Dahod. The total number of health care professionals is 1171. Sample size was estimated through the below formula and which was 300.

Place of Study: Dahod(Gujarat)

Source of Data: Primary through structured questionnaire (Appendix A)

Method of data collection : The population of the study shall be healthcare professionals from Medical, Dental, Physiotherapy, who are practicing and residing in Dahod proportionate stratified sampling will be used to assess the actual sample size the maximum sample size which can be achieve for each structure is derived from using following formula

$$\text{Sample size} = \frac{N}{1 + Ne^2}$$

Where,

Population Size = N | Margin of error = e = 0.05 at 95% confidence level

Time Scale: 2 months

- ❖ Type of sampling :- stratified sampling
- ❖ In present study the population proportionately calculate the sample size by the formula

$$\frac{\text{Total Number of specific specialities doctors}}{\text{Total number of doctors (Medical,Dental,Physiotherapy)}} \times 100$$

SR. NO.	SPECIALTY	%	NO. OF PARTICIPANTS
1.	Dental	6%	18
2.	General Surgery	7%	21
3.	Gastrologist	1%	3
4.	Urologist	1%	3
5.	Family Physician	6%	18
6.	Skin	3%	9
7.	Cardiologist	1%	3
8.	Neurologist	2%	6
9.	Chest	2%	6
10.	ENT	4%	12
11.	Plastic surgeon	1%	3
12.	Paediatrician	9%	27
13.	Orthopaedic	8%	24
14.	Oncologist	7%	21
15.	General Medicine	12%	36
16.	Ophthalmologist	8%	27
17.	Gynecologist	14%	45
18.	Physiotherapist	6%	18

Selection Criteria:

1. Inclusion Criteria:

- a) The people who have their clinics in Dahod and who are associated with some hospital.
- b) Who have signed the informed consent.

2. Exclusion Criteria:

- a) Healthcare Professionals not having their clinical practice in Dahod.

Material or equipment for the study: A structured questionnaire pertaining to socio-demographic factors, knowledge, attitude and perceived barriers to evidence based practice along with consent form.

Methodology and analytical procedure

A cross-sectional design using a self-report questionnaire composed of several instruments will be employed to compare and evaluate the knowledge, attitude and barriers towards evidence based healthcare among the various healthcare professionals of different field of dental, medical, physiotherapy.

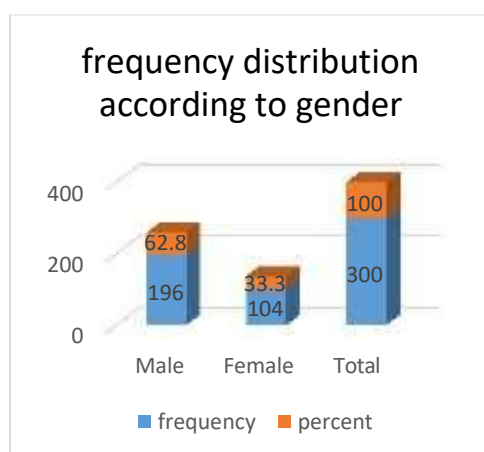
- Frequency distribution:- to check the frequencies according to gender of health professionals and to check frequency of specialty.
- ANOVA:- to check the difference in the knowledge of health professionals (Medical, Dental, physiotherapy)
- Cross tabulation:- to check the responses regarding each statement given by the participants.
- Chi-square test :- to check the association between attitude, perceived barriers statement and specialty
- These Tests were used for data analysis after importing the data in Microsoft excel using SPSS.

Chapter 5

Result and discussion

➤ **Table 1:- showing frequency distribution of participant according to gender**

Gender	Frequency	Percent
Male	196	62.8
Female	104	33.3
Total	300	100



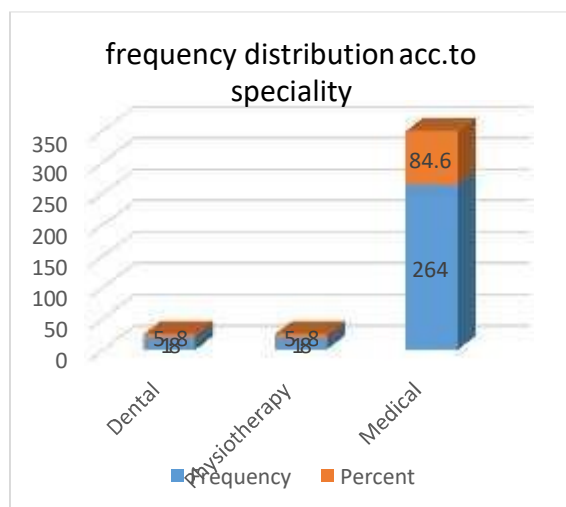
Graph 1 :- shows frequency distribution according to gender

The above table shows the frequency according gender among which 196 are male medical professionals and 104 are female medical professionals out of 300 total medical professionals.

➤ **Table 2 :- showing frequency distribution of participant according to department**

Specialty	Frequency	Percent
Dental	18	5.8
Physiotherapy	18	5.8
Medical	264	84.6

The above table of frequency distribution shows the frequency distribution according to the specialty such as dental **18**, physiotherapist **18** and medical professionals are **264**.



Graph 2:- shows frequency distribution according to speciality

➤ **Table 3:- showing mean age of the respondents**

Number	300
Mean	40.29

The above table shows the mean age of participants that is **40.29**

The above table shows the score of respondents towards knowledge of evidence based healthcare out of 10. Where the medical professionals have a mean score of 8.45 ± 1.73 , dental professionals having 7.77 ± 1.92 and physiotherapy having 8.45 ± 2.7 . the overall score is 8.30

indicating that overall knowledge among the professionals is of three speciality is around 83%.

The lowest is seen in physiotherapy professionals.

Table 4: shows the cross tabulation for the statement of My workload is too great for me to keep up to date with all the new evidence

Speciality	My workload is too great for me to keep up to date with all the new evidence			
	Uncertain	Disagree	Strongly disagree	Total %
Dental	2	10	6	6
Physiotherapy	2	6	10	6
Medical	164	92	8	88
Total	168	108	24	

Table 5:shows the cross tabulation for Evidence-based practice is a waste of time

Speciality	Evidence-based practice is a waste of time			Total %
	Uncertain	Disagree	Strongly disagree	
Dental	0	8	10	6
Physiotherapy	0	8	10	6
Medical	67	156	41	88
Total	67	172	61	100

Shows The Cross Tabulation For Evidence-Based Practice Is A Waste Of Time The above table shows the responses regarding the statement of EBS is a waste of time.

According cross tabulation 67 responded for uncertain about the answer, 172 disagreed with the statement and 61 responded for strongly disagree with the statement.

Table 6: shows the cross tabulation for I stick to tried and trusted methods rather than Changing to anything new

Specialty	Stick to trusted traditional method I stick to tried and trusted methods rather than changing to anything new					Total
	Strongly agree	Agree	Uncertain	Disagree	Strongly disagree	
Dental	0	0	1	12	5	6
Physiotherapy	2	2	0	8	8	6
Medical	0	0	89	109	109	88
Total	2	2	107	122	122	

Shows The Cross Tabulation For I Stick To Tried And Trusted Methods Rather Than Changing To Anything New The above table shows the cross tabulation result for the stick to traditional method according to which the 122 responses strongly disagree and disagree with the statement.

Table 7: shows the cross tabulation for Evidence based healthcare can reduce the healthcare costs

Specialty	Evidence based healthcare can reduce the healthcare costs					Total
	Strongly agree	Agree	Uncertain	Disagree	Strongly disagree	
Dental	2	8	7	1	0	6
Physiotherapy	30	2	7	1	5	6
Medical	74	95	76	18	1	88
Total	79	105	90	20	6	

Shows The Cross Tabulation For Evidence Based Healthcare Can Reduce The Healthcare Costs

The above table shows the cross tabulation result for the statement of EBS reduces the health care cost and according to it 105 responded that they are agree with the statement , 90 responded that they are uncertain about the statement and 79 responded that they are strongly agree with the statement.

Table 8:shows the cross tabulation for Literature and research findings are useful in my day-to-day practice

Specialty	Literature and research findings are useful in my day-to-day practice				Total %
	Strongly agree	Agree	uncertain	Disagree	
Dental	9	9	0	0	6
Physiotherapy	11	7	0	0	6
Medical	32	28	114	90	88
Total	52	44	114	90	

Shows The Cross Tabulation For Literature And Research Findings Are Useful In My Day-To-Day Practice

The above table shows cross tabulation result for the statement according to which 52 are strongly agree,44 agree, 114 uncertain , for the statement response.

Table 9:shows the cross tabulation for I have the ability to access relevant databases and the Internet at my facility

Specialty	I have the ability to access relevant databases and the Internet at my facility					Total %
	Strongly agree	Agree	uncertain	Disagree	Strongly disagree	
Dental	15	3	0	0	-	6
Physiotherapy	16	2	0	0	-	6
Medical	37	24	113	90	-	88
Total	68	29	113	90	-	

The Cross Tabulation For I Have The Ability To Access Relevant Databases And The Internet At My Facility

The above table shows the cross tabulation result according to it 113 are uncertain 90 are disagree with the statement respectively.

10: showing chi square test results for attitude and practice

Statements	Chi square	P value
My workload is too great for me to keep up to date with all the new evidence	90.240	.000
Evidence-based practice is a waste of time	35.282	.000
I stick to tried and trusted methods rather than changing to anything new	75.780	.000

Evidence based practice brings quick knowledge update	16.334	.038
Evidence based healthcare can reduce the healthcare costs	70.765	.000
Evidence based healthcare should be an integral part of curriculum	148.803	.000
My reimbursement rate will increase if I incorporate evidence-based practice into my practice	55.473	.000
Literature and research findings are useful in my day-to-day practice	88.430	.000
I have the ability to access relevant databases and the Internet at my facility	101.493	.000
My facility supports the use of current research in practice	91.371	.000

- The table shows the chi square result to check association between attitude statements and specialty shows that all statements are statistically significant and associated with specialty indicating that the attitude is associated with the specialty of the professionals.

➤ **Table 11:Cross tabulation for the each statements about perceived barriers for EBS practice**

shows the cross tabulation for Lack of skills to appraise scientific journal

Speciality	Lack of skills to appraise scientific journals					Total %
	Strongly agree	Agree	uncertain	Disagree	Strongly disagree	
Dental	-	-	-	6	12	6
Physiotherapy	-	-	-	9	9	6
Medical	-	-	-	202	62	88
Total	-	-	-	217	83	

Shows The Cross Tabulation For Lack Of Skills To Appraise Scientific Journal

The table shows cross tabulation result regarding the statement according to which 217 respondents disagreed with statement and 83 are strongly disagree.

Table 12: shows the cross tabulation for Lack of time due to excessive workload

Speciality	Lack of time due to excessive workload			Total %
	Uncertain	Disagree	Strongly disagree	
Dental	1	10	7	6
Physiotherapy	9	6	3	6
Medical	223	31	10	88
Total	233	47	20	300

Shows The Cross Tabulation For Lack Of Time Due To Excessive Workload The above table of cross tabulation shows the result about the statement according to it, 233 respondents are uncertain about the answer and 47 are disagree with the statement,

Table 13:Table shows cross tabulation for the statement about lack of interest

Specialty	Lack of interest			Total % about lack of interest
	Uncertain	Disagree	Strongly disagree	
Dental	0	8	10	6
Physiotherapy	3	9	6	6
Medical	39	213	12	88
Total	42	230	28	

Shows Cross Tabulation For The Statement About Lack Of Interest

The above table shows that the 230 has responded that they are disagree with the statement

Table 14:Table shows cross tabulation for the statement of lack of resources

Specialty	Lack of resources			Total %
	Uncertain	Disagree	Strongly disagree	
Dental	0	10	8	6
Physiotherapy	5	8	5	6
Medical	51	203	10	88
Total	56	221	23	

Shows Cross Tabulation For The Statement Of Lack Of Resources

The above table of cross tabulation results shows that about 221 participants responded that they are Disagree with statement. 56 participants are uncertain about the statement

Table 15: showing chi square test results for perceived barriers

Statements	Chi square
Lack of skills to appraise scientific journals	20.474
Financial Constraints	8.364
lack of time/workload	73.876
EBS is impractical for everyday life	22.525
tendency of traditional way of practice	23.960

mismatch between academic input and EBS	80.166
lack of interest	66.183
lack of relevant orientation	64.016
lack of resources	53.915
lack of clarity	41.711
lack of clarity	2.457

- The chi square result to check association between barriers statements and specialty shows that the statement “financial constraints” and “lack of clarity” is not significant (p value <0.05) indicates that there is no association with specialty of the professionals and the rest of the statements is statistically significant indicating that there is association with the specialty of the professionals.
-

Discussion:

Rice K, Hwang J, Abrefa-Gyan T, Powell K (2010) ⁷ examined the psychometric properties of the Evidence-Based Practice Questionnaire (EBPQ). The 24-item EBPQ was developed to measure health professionals' attitudes toward, knowledge of, and use of evidence-based practice (EBP). A confirmatory factor analysis was performed on the EBPQ given to a random sample of National Association of Social Work members (N = 167). The coefficient alpha of the EBPQ was .93. The study supported a 23-item 3-factor model with acceptable model fit indices ($\chi^2 = 469.04$; RMSEA = .081; SRMR = .068; CFI = .900). This study suggests a slightly modified EBPQ may be a useful tool to assess social workers' attitudes toward, knowledge of, and use of EBP. The current study also was undertaken through the use of structured questionnaire to analyse the level of knowledge, attitude and perceived barriers towards the practice of evidence based healthcare. The cronbach's alpha value for the same was found to be 0.84.

Ashri N et al (2016) physicians and dentists had an overall encouraging attitude towards EBP, with 85% showing interest in the current promotion of this process and 97% agreeing that it improves patients care. No significant differences were found between dentist and physicians with respect to all attitude items⁴ In recent study it has been found that all the speciality professionals (medical, dental, physiotherapy) reacted positive attitude towards the evidence based practice. However the study showed that the respondents were uncertain towards that whether evidence based healthcare should be part of curriculum.

Haron M I et al (2011)⁵ while 60.9% of the group acknowledged that they practice EBD most of the time fewer (40.8%) had reasonable understanding of EBD. Clinical decisions appear to be mostly based on the clinicians shown judgemental (73.3%) rather than no evidence based sources such as Pubmed (28.3%) other Cochran Library (6.7%). The mean EBD knowledge score for the group being above the mean. Training EBD was perceived essentially by a majority of the group⁵ The mean knowledge score is 8.30. The highest knowledge score was seen among the medical professionals followed by dentists and in the last physiotherapy professionals. In present study it is found that the professionals from the three specialities have positive attitude towards that the evidence based practice contributes to the knowledge.

Al Omari M, Khader Y, Jadallah K, Dauod AS, Al-Shdifat AA (2009) ⁶ conducted a study to assess the awareness, attitude and knowledge towards evidence-based medicine (EBM) among

primary health care doctors in Jordan and to identify the perceived barriers for practising EBM. A simple random sample of 34 comprehensive primary health care centres was selected from a list of 64 centres in Jordan using random number table. A family doctor visited all selected centres and invited the available doctors to participate in the study. Participants were asked to fill the self-administrated questionnaire that was designed to assess beliefs and attitude of doctors towards EBM. Results showed about 80.7% welcomed promotion of EBM and 91.1% agreed on that research findings are helpful in daily management of patients. About 85.1% stated that practicing EBM improves patient care, 68.3% stated that EBM reduces health care costs, 74.8% stated that EBM improves quick knowledge update, 93.6% reported that the doctor-patient relationship is affected positively by practicing EBM. The authors concluded that in spite of the positive attitude towards EBM, this study demonstrated numerous personal, interpersonal and institutional barriers towards implementing EBM which necessitate prompt action to formulate a national plan to overcome such barrier. In recent study attitude and barriers towards evidence based practice were being checked through structured questionnaires. Result showed that out of 172 participants are strongly disagree and 61 were disagree with the statement that EBP is a waste of time and they indicated that they support the EBP positively. Around 105 participants are agreed and 79 participants are strongly agree that EBP reduce the health care cost. They also responded positively about the statement that EBP brings knowledge (125 strongly agree, 90 agree). However, 233 participants responded that they are uncertain about the statement that lack of time due to work load which indicates that in spite of the positive attitude of health care professionals towards EBP there are some barriers for the evidence based practice.

Chapter 6

Summary, conclusion and recommendations

Summary

The chi square result to check association between attitude statements and specialty shows that all statements are statistically significant and associated with specialty indicating that the attitude is associated with the specialty of the professionals. Which shows that null hypothesis is rejected.

The chi square test was carried out to check association between barriers statements and specialty shows that the statement “financial constraints” and “lack of clarity” is not significant (p value <0.05) indicates that there is no association with specialty of the professionals which indicates failing to reject the null hypothesis and the rest of the statements is statistically significant indicating that there is association with the specialty of the professionals and which indicates null hypothesis is rejected.

Kruskalwalis test output shows that for the attitude statement “part of curriculum” and “EBS is trusted method” is not statically significant (p value >0.05) indicating that there is no difference in the attitude between the specialties’ of 3 discipline (dental , physiotherapy & medical) which indicates failing to reject null hypothesis. However for the rest of the statement it is statically significant showing that there is a difference in attitude between 3 specialties’ (p value <0.05) and null hypothesis is rejected.

Kruskalwalis test output shows that for the barriers statement for the “EBS is impractical for everyday life and lack of peer support” is not statically significant (p value >0.05) indicating that there is no difference in the barriers statement between the specialties’ of 3 discipline (dental, physiotherapy & medical) which indicates failing to reject null hypothesis. However for the rest of the statement it is statically significant showing that there is a difference in barriers statement between 3 specialties’ (p value <0.05) which indicates null hypothesis rejected.

The ANOVA test was carried out for analyzing the difference between the knowledge scores among the three specialties. The result showed that the sum of square is 58.926 and p value is .00 which is less than 0.05. The null hypothesis “for the knowledge score among three specialty” is rejected. Hence forth, turkey’s post hoc shows the mean difference between each

pair of specialty where maximum difference is between dental and physiotherapy with score of **1.11**(p value 0.160),the difference between dental and medical is **-0.67** t (p value 0.282), between medical and physiotherapy with the mean difference of **1.784** **having p value 0.000** barriers in present study towards EBP are lack of clarity, lack of relevant orientation, and work load .

Conclusion

The findings of this study provide better insight towards the use of evidence based practice among health care professionals. Which suggests that incorporation of such practice will be greatly beneficial in providing quality care. It also provide regular updates to health care professionals on present treatment modalities and recent advances in the field of health care.

Medical, Dental and Physiotherapy professionals have good knowledge on evidence based practice and show positive attitude to promote EBP. In present study the knowledge score of medical professional is above 80%, for dental it is 70% and for physiotherapy it is 60% respectively which also indicate that evidence based practice should be promoted much in different ways to make the health care professionals aware about it.

In this study it is found that lack of time and work load is perceived barriers among and so, the professionals does not show much interested in the evidence based practice. However it is required to formulate some strategies to implement the evidence based practice. Management levels have to be involved in linking research evidence to work-flow in a way that does not adversely affect productivity and flow of patients. They need to create strategies for this through collaboration, incorporating all clinical disciplines. By doing so it would make evidence-based practice easy to access, time efficient and relevant to clinical practice need.

Recommendations

- Evidence based practice teaching in curriculum will prove to be significant step in effective and efficient delivery of care to the patient.
- Identification of barriers may help to design programs for enhancing evidence based practice among health care professionals.
- Conduct formal training of practitioners to develop necessary skills required to evidence based practice.
- Development of program on how to effectively apply evidence in clinical uncertainties, it might prove to be beneficial for future practice
- Use a variety of channels such as, magazines ,journals, seminars, conference and formats to promote evidence-based research practice that are appropriate to the target audiences, including health professionals and adult educators
- Explore new mechanisms to pull together and share data and research findings as they become available
- Develop guidance on how to change practice as a result of research findings
- Support networks of researchers and practitioners to facilitate learning and changes in practices

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APPENDIX I

QUESTIONNAIRE

“A study to assess knowledge, attitude and barriers towards evidence based practice among the health professionals in Dahod.”

Name:

Gender:

Age:

Department:

Clinical Experience:

PART -I

Q1. What is the first step towards evidence based healthcare practice?

- | | |
|---------------------------------|-------------------------------------|
| a. Defining a relevant question | b. Cultivating a spirit of enquiry |
| c. Searching evidence | d. Critically appraisal of evidence |

Q2. Which among the following can be used as a source of evidence based practice in different areas of evidence based healthcare?

- | | |
|----------------------|---|
| a. research evidence | b. the client's values |
| c. expertise | d. circumstances and the practice context |

Q3. How to identify the gaps in your professional practice?

- | | |
|---|------------------------------|
| a. practice-based audits and peer
review processes | b. Consultation with experts |
|---|------------------------------|

- c. guidelines developed by professional organizations
- d. None of the above

Q4. What do you understand by confidence interval?

- a. range that estimates the true population value for a statistic
- b. confidence of result calculation
- c. can be predicted for qualitative data
- d. difficult to calculate

Q5. Which among the following is true for sensitivity and specificity?

- a. statistical measures of the performance
- b. true positive rate and true negative rate
- c. test's ability to identify a condition correctly
- d. test's ability to exclude a condition correctly

Q6. Which explains the term Meta analysis?

- a. the effects from all studies to give mean effect and other important statistics
- b. statistical literature review
- c. estimation of the effect of study and subject characteristics on the effect
- d. conducting research about previous research

Q7. Which explains the term systematic review?

- a. use of statistical methods to summarise the results of these studies.
 - b. statistical literature review
 - c. answers a defined research question by collecting and summarising all empirical
 - d. conducting research about previous research
-

evidence that fits pre-specified eligibility criteria.

Q8. What do you understand by bias?

- a. One sided perspective
- b. error in choosing the individuals or groups to take part in a scientific study
- c. external influences that may affect the accuracy of study
- d. all the above

Q9. Why it is important to analyze the evidence critically?

- a. To find if the results of the study valid
- b. Are the results reliable
- c. To filter and narrow down to find the “keeper studies”
- d. all the above

Q10. What do you mean by relative risk?

- a. risk of developing one condition if you have the exposure as compared (relative to) another group of differing exposure.
- b. association
- c. alculated from cross-sectional and case-control study designs
- d. Both b & c

PART -II

S. No	Statements	Strongly Agree	Agree	Uncertain	Disagree	Strongly Disagree

1.	My workload is too great for me to keep up to date with all the new evidence					
2.	Evidence-based practice is a waste of time					
3.	I stick to tried and trusted methods rather than changing to anything new					
4.	Evidence based practice brings quick knowledge update					
5.	Evidence based healthcare can reduce the healthcare costs					
6.	Evidence based healthcare should be an integral					

	part of curriculum					
7.	My reimbursement rate will increase if I incorporate evidence-based practice into my practice					
8.	Literature and research findings are useful in my day-to-day practice					
9.	I have the ability to access relevant databases and the Internet at my facility					
10.	My facility supports the use of current research in practice					

PART -III

S. No	Statements	Strongly Agree	Agree	Uncertain	Disagree	Strongly Disagree
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1.	Lack of skills to appraise scientific journals					
2.	Financial Constraints					
3.	Lack of time due to excessive workload					
4.	Evidence based practice is impractical for everyday life					
5.	Present tendency for traditional way of practicing					
6.	Mismatch between academic inputs and evidence based practice					

7.	Lack of Interest					
8.	Lack of relevant orientation & training					
9.	Lack of access to the resources					
10.	Lack of clarity about the concept					
11.	Lack of peers' support					