

Original Research Article

## Knowledge and Beliefs Concerning Evidence Based Practice amongst Psychiatrists: A Questionnaire Survey

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Received: 16/12/2015

Revised: 30/12/2015

Accepted: 01/01/2016

### ABSTRACT

**Purpose:** Evidence Based Psychiatry (EBP) has become an emerging need in the field of psychiatry. A study was conducted to assess Knowledge, Attitude and Practice (KAP) of psychiatrists towards EBP and the associated factors that could impact the same.

**Methods:** A questionnaire survey was administered to assess knowledge and attitude of psychiatrists towards EBP.

**Results:** 148 psychiatrists were surveyed of which 101 responded. As per data analysis 44.6% had average knowledge about EBP, 33.7% were very confident and 21.8% were not confident at all in their knowledge about EBP. Significant factors for this difference included access to medical literature and regular internet access, previous exposure to research methodology and research experience and practicing in or in affiliation with an academic institute. ( $p < .05$ ) However, majority (91.1%) of doctors had an equivocal attitude and they emphasized that they would benefit greatly with further information on EBP.

**Conclusion:** Our results reveal that most psychiatrists have a neutral attitude and an average understanding of EBP. However, factors like easy availability of literature, practicing in an institutional environment and previous exposure to research training and experience, influenced knowledge significantly but had no effect on attitude towards EBP.

The most significant results of this study comes in terms of a positive attitude of psychiatrists towards EBP and their willingness to know more, either through conferences or related workshops.

**Key words:** KAP, EBP, Psychiatrists.

### INTRODUCTION

It is often assumed that training health professionals in evidence based psychiatry reduces unacceptable variation in clinical practice and leads to improved patient outcomes. This will only be true if the training improves knowledge and skills and that these in turn are translated into improved clinical decision making.

*Evidence based medicine (EBM) refers to the 'contentious, explicit and judicious use of the current best available*

*evidence in making decisions about the care of individual patients.'*<sup>[1]</sup>

Mental health service providers are on the front line of delivering services to youth and families. However, treatments and interventions being used in usual care are often not based on evidence of efficacy or effectiveness. Although most evidence-based models do not capture the richness and complexity of the provider-consumer relationship, providing services with evidence of effectiveness is an important

priority. If the most efficacious and effective interventions are to be disseminated and implemented in community-based settings, a better understanding of mental health providers' attitudes is needed in order to more effectively tailor dissemination and implementation efforts towards adoption of evidence based practice. [2]

One study conducted by Garland AF et. Al. on mental health provider attitudes towards adoption of Evidence-Based Practice showed that provider's attitude varied by educational level, level of experience and organizational context. [3]

Another one study by Hadley J et. Al. on KAP of EBM among allied health care professionals showed that clinical practitioner's learning needs do vary according to the type of profession, time since graduation and prior research experience. [4]

Attitudes toward innovation can be a precursor to the decision of whether or not to try a new practice. Still, little is known about mental health service provider attitudes toward adoption of EBP or even how best to measure such attitudes. Indeed, service provider attitudes toward organizational change in community practice have been studied, but constrained samples have limited the generalizability of such studies. [5]

This study is a brief measure to assess knowledge and attitude of a psychiatrist for evidence based practices in relation to a set of a clinical experience, a set up of clinical practice (Private/Institutional), access to infrastructure settings like computer/library for acquiring information on EBP and prior research experience.

## **MATERIALS AND METHODS**

**Study Design:** This was a cross-sectional explorative study. This study was conducted on psychiatrists attending a national level conference.

### **Sample Size:**

Total number of psychiatrists surveyed: 148

Total number of psychiatrists who responded to the questionnaire: 101(Out of 148)

### **Study Participants:**

Participants for this study were psychiatrists attending a national level conference on 'Evidence Based Psychiatry' theme in which they were given a semi-structured questionnaire to fill up that will assess their knowledge, attitude and practices for evidence based psychiatry.

#### *Inclusion Criteria:*

- Consenting psychiatrists participating in the conference

#### *Exclusion Criteria:*

- Psychiatrists who are not willing to give informed written consent for participating in the study
- PG students and other non-psychiatric professionals/faculties

#### *Methodology:*

- Prior permission of institutional ethics committee of Sumandeep Vidyapeeth was taken to start the study.
- Prior written informed consent from participating psychiatrists was taken. They were assured about confidentiality of the data.
- Then participants were given to fill case report form (CRF) containing demographic details and a semi structured KAP (knowledge, attitude & practice) scale before the start of the session.

### **Instruments:**

#### **Case Report Form:**

It contains all demographic details and other important information like years of clinical experience, type of consultancy(private/institutional), access to infrastructure settings for gaining updates on evidence based practice, prior research exposure etc. that may have an impact on psychiatrist's knowledge, attitude and practice for evidence based psychiatry.

Semi-structured KAP (Knowledge, Attitude & Practice) Scale:

The questionnaire included questions relating to the practitioners' self assessment of their literature searching behaviour, their self perceived knowledge of their own critical appraisal skills and beliefs. Multiple choice answers and six-point Likert scales were used to measure responses, without a 'don't know' or neutral point on the scale. However, participants were instructed to tick a box if they did not understand the question. Questions about knowledge included statements relating to how confident the respondents feel about assessing research methodology.

The statements address perceived self-confidence in interpreting statistical tests, evaluating bias and assessing sample size. Answers were scored from '1' not confident at all to '6' very confident. Items on beliefs about EBP included statements such as 'EBP is essential in my practice', 'clinical judgement is more important than EBP' and 'I feel that I need more training in EBP'. Participants scored their answers on a range from '1-6', with '1' indicating that they disagreed strongly with the statement and '6' suggesting that they agreed strongly with the statement. [4, 6, 7]

**Ethics:** This study was conducted after obtaining approval by “Sumandeep Vidyapeeth Institutional Ethical Committee”.

**Statistical analysis:** ANOVA, t-test and chi-square tests are used  
All data was analyzed using SPSS software, version 14.0

## RESULTS

148 psychiatrists were surveyed, out of which 101 responded.

Out of 101 respondents, 82(81.2%) were male and 19(18.8%) were female. The age ranged from 30 to 75 years.

**Table 1: Knowledge related to Evidence Based Psychiatry amongst psychiatrists.**

Self Perception of Knowledge	Frequency	Percent (%)
Not confident	22	21.8
Averagely confident	45	44.6
Highly confident	34	33.7
Total	101	100.0

As per shown in the table, 44.6% had average knowledge about EBP, 33.7% were very confident and 21.8% were not confident at all in their knowledge about EBP.

**Table 2: Attitude related to Evidence Based Psychiatry amongst psychiatrists.**

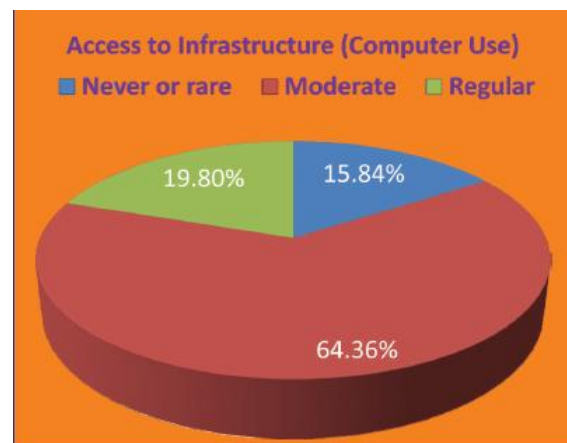
Attitude towards EBP	Frequency	Percent (%)
Neutral/Equivocal	92	91.1
Strongly Agree	9	8.9
Total	101	100.0

As per shown in the table, majority (91.1%) of doctors had an equivocal attitude and they emphasized that they would benefit greatly with further information on EBP. Only 8.9% believed strongly in an EBP approach.



**Figure 1: Distribution of years of clinical experience in study participants**

As shown in figure 1, majority(38.61%) have less clinical experience(1-5 years) and 28.71% of psychiatrists have more clinical experience(>20 years).



**Figure 2: Distribution of level of access to infrastructure settings in study participants**

As shown in figure 2, 15.84% of practitioners have rare access to infrastructure settings like computer use for gaining updated knowledge on EBP. 19.80% have regular access to the same and majorities (64.36%) have moderate exposure to such settings.

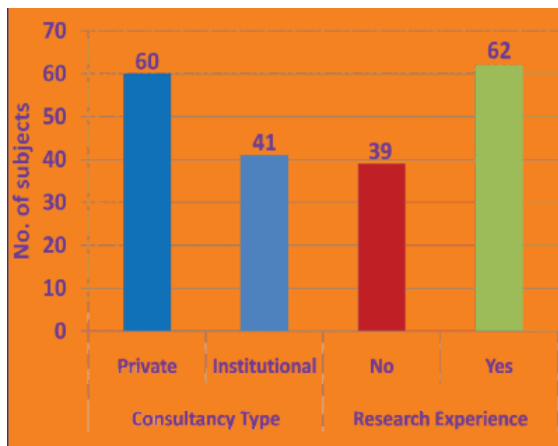


Figure 3: Distribution of consultancy type and prior research experience in study participants

As shown in figure 3, of the 101 respondents, 60 were private practitioners and 41 were consultant in an academic institute.

Out of 101, 62 psychiatrists had prior research experience.

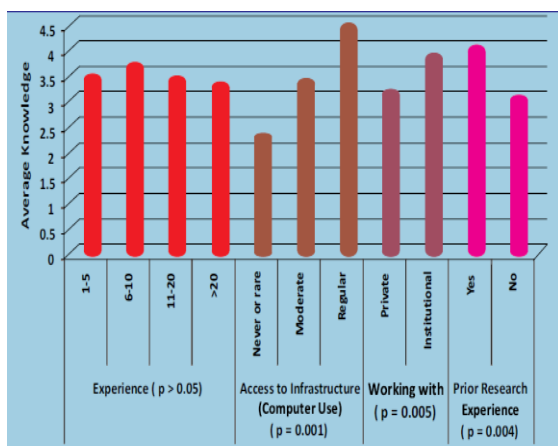


Figure 4: Clinical experience, access to infrastructure settings, consultancy type & prior research exposure and its association with knowledge about EBP in participants

As shown in figure 4, no significant difference in knowledge is observed in relation to clinical experience. (p=.844)

Significant difference in mean knowledge about various principles of EBP is observed in those who have regular

access to resources like computer to search for latest evidence in psychiatry compared to those who have not.(p=.001)

Significant difference is found in mean knowledge in institutional consultants compared to private practitioners about various principles of EBP.(p=.005)

Those who had prior research experience showed significant difference in mean knowledge compared to those who have not.(p=.004)

## DISCUSSION

This study identified several issues that require attention in the provision of training of various principles of EBP for psychiatrists. Amongst psychiatrists the perceived need to obtain training in EBP was high and perception of competence was low.

To ensure the validity and generalizability of the present study, questions were selected from reliable and previously validated questionnaires. The present study suggests that like previous studies which found that physicians lack methodological competence in critical appraisal skills and various principles of evidence based medicine, psychiatrists also require skills for the same. [4,8,9]

The findings of this study are in accordance with the findings of the study by Hadley J et. al. which was conducted on physicians from various specialties to assess their knowledge and beliefs concerning EBM. In this study, it was found that psychiatrists reported that they did not feel confident at assessing study design, generalizability of the research or evaluating sample size and statistical tests. Furthermore, many junior psychiatrists stated that they feel importance of learning various principles of EBP but they are unsure regarding whether patient choice and their own clinical judgment are more important and should override research evidence. All the psychiatrists had a common consensus that EBP was essential

to their practice but they felt they required further training in the subject. [4]

As far as attitude is concerned, findings of this study did not corroborate with the findings of the study by Garland AF et Al which stated that mental health provider attitudes towards adoption of EBP varies by educational level, level of experience and organizational context. But in the present study, psychiatrists' attitude did not vary by such factors. [3]

Despite of considering the need for EBP, there are some factors which are barriers towards implementation of EBP in clinical practice. As stated by Gray et Al., the first problem is one of 'information overload' which creates confusion for clinicians who want to determine which treatments are truly most effective. There are thousands of medical journals and millions of articles; therefore, no psychiatrist or other clinician should expect to keep up with all of the developments in his or her field. Furthermore, when one looks at the results of various studies, they often appear to be contradictory. In part, this is caused by false-positive and false-negative results, which often arise from small samples. One could consult review articles to summarize the literature, but most such reviews are "journalistic" or "narrative" reviews, not systematic reviews. As a result, such articles are subject to the biases of the review's author(s), both in terms of studies cited and in the method of summarizing conflicting results. Textbook chapters have the added problem of rapidly becoming out of date. All of this contributes to the lag before advances in treatment are recognized and find their way into practice. [10]

The second common complaint heard from clinicians is about results of randomized study. Clinicians often say that randomized studies enrol patients very unlike 'my patients'. This statement has some truth to it. First, patients in clinical studies tend to be younger *or* older than many patients in clinical practice. In

medicine (less so in psychiatry), women have been underrepresented in clinical trials. Minorities are often absent or present in such small numbers as to make subanalyses meaningless. Many clinical trials exclude 90% or more of potentially interested subjects. For instance, Yastrubetskaya et Al (1997) found that only 4% of 186 elderly patients with elevated Hamilton Rating Scale for Depression scores were eligible for a Phase III trial of a new antidepressant. Randomized studies often exclude comorbid problems, whereas most patients seen in clinical practice have one or more comorbidities. To determine whether the results from placebo controlled studies conducted in patients with manic episode can be generalized to a routine population of hospitalized acute manic patients, Storosum et. al. (2004) examined the baseline characteristics of 68 patients with 74 episodes of acute mania who had been referred for routine treatment. In this study only 16% of the manic episodes would have qualified for the hypothetical trial. [11,12]

Because of these issues, clinicians need to consider the evidence of a treatment's efficacy as a 'source' of information. In this context, the challenge of the clinician is to view all evidence with a keen eye to its limitation but also considering its usefulness at the same time.

One of the limitations of this study is its small sample size. So, results can't be generalized. In this study, random sampling process was not employed and the sample was from participants who voluntarily attended conference on 'Evidence Based Psychiatry' theme. Therefore our sample may be restricted to those individuals who might have been more aware and self-motivated than other practitioners. So, chances of informant bias could be possible. However, this study does provide a starting point for further research in the same field.

## CONCLUSION

Our results reveal that most psychiatrists have a neutral attitude and an average understanding of EBP. However, factors like easy availability of literature through resources like computer/medical library, practicing in an institutional environment and previous exposure to research training and experience, influenced knowledge significantly but had no effect on attitude towards EBP. The most significant results of our study comes in terms of a positive attitude of psychiatrists towards EBP and their willingness to know more, either through conferences or related workshops. Our results are only preliminary and we recommend further replication of this study.

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How to cite this article: Thaker SR., Kataria LR., Tanna KJ. Knowledge and beliefs concerning evidence based practice amongst psychiatrists: a questionnaire survey. *Int J Health Sci Res*. 2016; 6(1):89-94.

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