

COGNISANCE OF MEDICAL LIBRARIANS IN MEDICAL EDUCATION, RESEARCH AND CLINICAL - DECISION MAKING FOR REDUCING STRESS AMONG DOCTORS

Vijay Dalal * Dr. Sanjiv Kadyan **

* **Ph.D. Research Scholar,**
Department of Library and
Information Science, MDU,
Rohtak, Haryana, India

****Assistant Professor,**
Department of Library and
Information Science, MDU,
Rohtak, Haryana, India

QR Code



Abstract:

Doctors are facing many challenges in day to day life due to advancement of medical diagnosis and communication technologies. Medical librarian having skills and knowledge in advancement technologies and provide correct, updated and evidence based answers for early diagnosis of diseases. They are also to improve the quality of treatment and reduction in medical errors. The present study can be useful for describing the significant role of medical librarian in the health care institutes and medical system for decreasing medical errors and mortality and improving medical facilities which reduces stress among doctors.

Key words: Medical Librarian, Clinical Information, Skill Knowledge, Information Provision

Introduction:

Medical Librarians can play a significant role in accessing and reviewing the medication information and providing this information to the health care practitioners. Medical librarians are an important part of the medical organizations (Banks DE, 2007). They are expertise in using different database and reference materials which are necessary for doing a research in medical education. They are also helpful in providing recent and old clinical information and reference

for the best diagnosing the patients. Cooper and Crum described that medical librarian play a significant role in medical education, clinical and basic medical research. They provide recent clinical research articles to the doctors in the evidence based manner (Cooper ID, 2013 and Marshall JG, 2013). They also have active role in award development, data entry management and in the preparation of the systematic reviews. An internet based survey was conducted on health professionals working in 1118 hospitals in which

the role of medical librarians in medical education and clinical decision making was examined. In this survey, three-fourth of respondents stated that they apparently handled the situations of patients differently positively due to the information provided by the medical librarian. These positive changes include suggestion to the patients, treatment and choice of drugs (Banks DE, 2007). Medical librarians provide medical information resources to the medical students, residents and physicians and senior faculty and other medical staff (Sollenberger JF, 2013).

Types of Stress:

Physical: Intense exertion, manual labor, lack of sleep, travel

1. Chemical: Drugs alcohol, caffeine, nicotine and environment pollutants such as cleaning chemical or pesticides
2. Mental: Perfectionism, worry anxiety, long hours
3. Emotional: Anger, guilt ,loneliness, sadness
4. Nutritional: Food allergies, vitamin and mineral deficiency

1. Eustress: It is also known as positive stress. When the person is happy with their work and enjoy their work in particular institute or organization and have positive attitude toward their own work and organization, in that case individuals have positive stress. Such type of individuals also motivates their colleagues also for improving their work and reduces the level of

stress in the other individuals. Most of the individuals have positive feelings for their demanding task. At the time of examination, students get depression due to stress but some students have positive stress towards exam to prove themselves and enjoy the challenging work. This type of stress can be occurred through marriage, promotion, earning money, making new relationships and making new friends, graduation, having a child, taking a vacation, retirement, learning new hobbies etc. Eustress makes positive effects such as increased motivation, focused energy, feeling happy and good performance.

2. Neustress: Neustress is the condition in which the brain responds normally or indirectly to the external or internal factors or needs. This type of stress does not affect people and it is neither helpful nor harmful

3. Distress: This stress is also called negative stress. If any person reacts negatively towards any situation and becomes very hyper and aggressive, this shows distress condition of that individual. Distress individual can not able to take correct or healthy decision to face difficult situations which had bad impact on the health also. Person with negative stress cannot make good relations with the colleagues. Distress can be produced by many factors or situations which leads many health issues. Symptoms of distress are poor concentration, depression, short-temper, fuzzy thinking, accelerated speech, churning stomach, anxiety and irritability etc. Common types of

distress are divorce, punishment, injury, negative emotions, financial problems, hard work . It can cause anxiety, decreased function, mental or physical problems. People who experienced stress which reduced the effect on productivity at work, physical illness, wasted energy, reduced satisfaction, low self-esteem, family breakdown etc.

Objectives:

This study aimed to find out the significant role of medical librarians in medical education, research and clinical decision making for reducing stress among doctors.

1. To study how the library information resources are useful for doctors in reducing stress.
2. To find out the positive and negative changes reported by the doctors due to library information resources provided by medical librarians.

Hypothesis:

1. There was no significant use of library information resources for doctors in reducing stress.
2. There were no significant positive and negative changes reported by the doctors due to library information resources provided by medical librarians.

Review of literature

Ilogho JE et al (2020) conducted a study on the role of librarians in health information provision for depression reduction. This study observed a effective strategy that could be employed to

promote the healthcare of depressed people to increase awareness reduction by professional librarian and making these information sources available to the depressed people and mental healthcare givers. A medical librarian provides information through current awareness services, library referral services and bibliotherapy.

Masomi L (2015) conducted a study for analysis of role of hospital librarian to inform specialist assistants and doctors. Study was carried out by using 25 questionnaires and distributed among 15 doctors. Result showed that 65.45% of doctors used library daily and once a week. 93.5%of doctors reported that librarian had important role in providing recent and up to date information for diagnosis and treatment of diseases or patients problem.

Motamedi F (2014) evaluated the role of clinical librarians in providing accurate and updated information to the physicians working in rural area. 20 physicians were taken in this research. Result showed that clinical librarians were able to provide information to the physicians which were verified by the specialists. Hence, medical librarians should improve their English language and their skills, knowledge about internet and basic medication.

Shekhkanlo (1996) conducted a research about the use of hospital library at university of medical science. This research showed that hospital library is used as a place to protect the books, journals, thesis and other study materials which are useable for doctors. Doctors are not aware about the role

of medical librarians in hospital library and their skills, knowledge and abilities.

Research Methodology:

Study Design: The research design selected for this study was cross - sectional observational study.

Study Population and sample: The population for this study included Allopathic Doctors with MBBS & MD Degree in PGIMS, Rohtak and BPS GMC, Sonapat, Haryana, India. In my population I have taken 150 Doctors (75 doctors from PGIMS Rohtak and 75 doctors from BPS GMC Sonapat) from Haryana were enrolled in present study.

Sampling Technique:

A list of allopath doctors with MBBS & MD degree was obtained from the medical colleges of Haryana. Then a list of doctors was prepared. Simple random sampling technique was used to select the participants. Doctors were enrolled using computer generated random numbers according to the list of doctors

Data analysis and Interpretation: All the participants were doctors working in Pt. B.D. Sharma PGIMS, Rohtak and BPS Govt. Medical College for women, Sonapat at the time of study. Total 150 questionnaires were randomly distributed among library users' doctors who followed the inclusion criteria and volunteered to participate in the present study. A self-administered questionnaire was used for

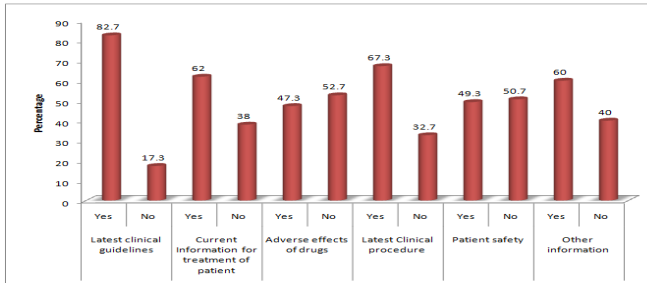
collecting data for this study. The subjects, who remained anonymous, were asked to complete the questionnaire and return it to the researcher. Responses were kept confidential.

Observation:

The present study was conducted on 150 doctors, 75 doctors working in PGIMS Rohtak and 75 doctors belonged to BPS GMC Sonapat. This study was carried out to know the significant role of medical librarians in reducing stress among doctors by providing library information resources.

Table: 1: Showed how information provided by library information resources helpful in reducing stress among doctors?

S. No	Information	Indicators	No. of the Respondents	Percentage
1.	Latest clinical guidelines	Yes	124	82.7
		No	26	17.3
2.	Current Information for treatment of patient	Yes	93	62.0
		No	57	38.0
3.	Adverse effects of drugs	Yes	71	47.3
		No	79	52.7
4.	Latest Clinical procedure	Yes	101	67.3
		No	49	32.7
5.	Patient safety	Yes	74	49.3
		No	76	50.7
6.	Other information	Yes	90	60.0
		No	60	40.0

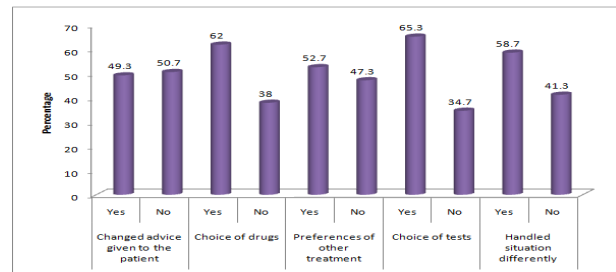


Graph 1: Showed how information provided by library information resources helpful in reducing stress among doctors?

The table revealed about information provided by library information resources for reducing stress. A large majority (82.7%) doctors were found agree that latest clinical guidelines provided by library information resources may be fruitful for reducing level of stress. While 62 % doctors stated that current information for treatment of patients provided by library information resources may be helpful for reducing level of stress, whereas information provided by library information resources about adverse effects of drugs may be helpful to reduce the level of stress. The table further illustrated that 67.3 % doctors were of the view that latest clinical procedure provided by library information resources may be helpful for reducing level of stress. However, information about patient safety provided by library information resources may also be helpful for reducing level of stress and 60 % doctors stated that other information provided by library information resources may be helpful for reducing level of stress.

Table 2: Showed Positive changes reported in among doctors due to library information resources.

S. No.	Information	Indicators	No. of the Respondents	Percentage (%)
1.	Change d advice given to the patient	Yes	74	49.3
		No	76	50.7
2.	Choice of drugs	Yes	93	62.0
		No	57	38.0
3.	Preferen ces of other treatment	Yes	79	52.7
		No	71	47.3
4.	Choice of tests	Yes	98	65.3
		No	52	34.7
5.	Handled situation differently	Yes	88	58.7
		No	62	41.3



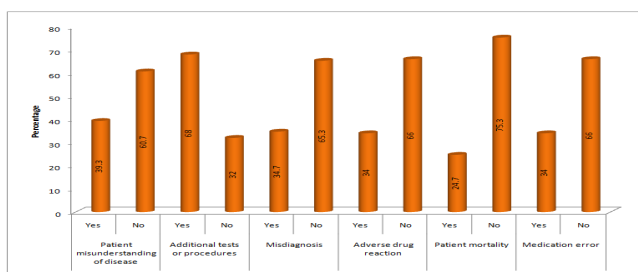
Graph 2: Showed Positive changes reported in among doctors due to library information resources.

The table revealed about positive changes reported in doctors as a result of information. The analysis showed that 49.3 % doctors felt positive changes in them as a result of information and they changed their advice for the patients. While 62% doctors changed drugs as a result of information, whereas 52.7% doctors felt positive changes about “preferences of other treatment”.

65.3% doctors felt positive changed in choice of tests and 58.7% doctors handled situation differently after information.

Table 3: Showed new approaches added by the doctors in the diagnosis after information from library resources.

S . N o	Informati on	Indic ators	No. of the Respon dents	Perce ntage (%)
1	Patient misunderst anding of disease	Yes	59	39.3
		No	91	60.7
2	Additional tests or procedures	Yes	102	68.0
		No	48	32.0
3	Misdiagno sis	Yes	52	34.7
		No	98	65.3
4	Adverse drug reaction	Yes	51	34.0
		No	99	66.0
5	Patient mortality	Yes	37	24.7
		No	113	75.3
6	Medicatio n error	Yes	51	34.0
		No	99	66.0



Graph 3: Showed new approaches added by the doctors in the diagnosis after information from library resources.

The table revealed about the new approaches added by the doctors about the diagnosis information from library resources. The analysis showed that 39.3% doctors added new approaches about patients misunderstanding of diseases,

while 68% doctors added additional tests or procedures after getting diagnosis information from library resources. 34.7 % doctors added new approaches about misdiagnosis of the patients, whereas 34% doctors added new approaches about adverse drug reaction, 24.7% doctors added information about patient mortality and 34 % doctors learned and added new approaches about the medication error after diagnostic information from library resources.

Finding of the study:

In the present study, 82.7% doctors were found that latest clinical guidelines provided by library information resources may be fruitful for reducing level of stress while 62 % doctors stated that current information for treatment of patients provided by library information resources may be helpful for reducing level of stress. 67.3 % doctors were of the view that latest clinical procedure provided by library information resources may be helpful for reducing level of stress.

49.3 % doctors felt positive changes for changing their advice for the patients while 62% doctors changed drugs as a result of information, whereas 52.7% doctors felt positive changes about “preferences of other treatment”. 65.3% doctors felt positive changed in choice of tests and 58.7% doctors handled situation differently after information. Hence, medical librarian could have significant role in providing about the latest advances in medical sciences, diagnosis, proper treatment and clinical decision making. Health

information resources available in medical libraries are journals, reference materials, textbook both in hard and soft format and internet. These resources are useful to satisfy the need of medical staff and doctors for decreasing level of stress.

Conclusion: In the present research, it was observed that current information for treatment of patients provided by library information resources may be helpful for reducing level of stress, whereas information provided by library information resources about adverse effects of drugs may be helpful to reduce the level of stress. The wrong prescription, treatment from old techniques, dissatisfaction of patients also emerged an importance stressor among doctors. Doctors have to up-to-date from new techniques of treatments, knowledge about pathological tests, etc. Hence, library resources such as journals, books, research papers may help the doctors to aware of new treatment techniques, which reduces the doctors' stress levels.

Suggestions:

1. Health organizations should be aware of role of medical librarians in the hospital library and provide them perfect software for getting latest information.
2. Medical librarians should provide up-to-date resources to specialized doctors.
3. Medical librarians should be able to provide software services for doctors to easy access to present information.

4. Training should be given to all medical library staff for using of internet to increase their ability for providing latest information to the doctors.

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