

# Role of communication in osteopathic practice

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## Introduction:

### Background-

Communication can be defined as a process of information exchange which utilizes symbols, signs and other behavioral techniques as its important tool, (Allen D, 2002). As in many different sectors, communication plays vital role in the health care profession also. Thus importance of communication in the osteopathic and different medical specialties cannot be denied. Good communication is essential to maintain professional and personal integrity. Communication basically means the way of communicating one's message or to express your idea to someone. Mehrotra (1996, pp 30) highlights with reference to medical representatives - *“the real meaning of communication is not only to convey or express, but to get the message understood correctly by the person with whom you are communicating. Remember, your communication is not completed till it is rightly perceived by the other person in the same manner (with whom you are communicating) in the way you wanted it to be”*

Interdisciplinary communication refers to communication between two or more disciplines in a communication process. This comes to fore in any complex organization, and once again is an important part of any medical institute. Professionals from various departments have to interact with each other in order to provide best services to a patient. A systematic and healthy communication is necessary and essential in order to ensure proper care of patients. Kohn et.al. (2000) highlighted in his research the fact that improper communication is one of the leading causes of patient death these days. This arises from haphazard clinical process and ill maintained clinical environment leading to lack of coordination.

Organizations around the world employ various systems and techniques to enhance communication within a team and within the organization between various teams. Hospitals and medical institutes, being complex organizations, also implement multi-layered strategies to promote communication. In order to provide recent updates and to have first hand information about status of their patients, most medical professionals prefer face-to-face interactions. This is the most common however; various other communication techniques also exist in hospitals. These include telephones, fax, emails and paging. Maximum information in a hospital can be

obtained from various professionals in charge of information and these professionals include nurses, assistants and staff that maintain records. Coiera (2000) pointed out that communication system between different medical departments is mediated by the clerical staff mentioned earlier.

Various researchers have conducted investigations to uncover reasons and corresponding consequences of poor communication between various medical specialties, especially between osteopaths and other specialists. Studies have pointed that a major chunk of errors in which an osteopath was involved, was caused by poor communication between osteopaths themselves and other professionals. Abramson (1980) concluded that 15% of human errors were due to improper communication services. Various other studies have researched and concluded the same – poor communication is one of the major factors leading to increased morbidity in medical sectors, especially in case of osteopaths. Some of these studies are Harvard Medical Practice Study (Brennan,1991), Institute of Medicine report (Kohn, 2000) and Quality in Australian Health Care Study (Wilson, 1995). Apart from osteopaths, other medical specialties have attracted researchers' attention for communication issues as well. Researchers have appealed for better communication system in Intensive care units (Beckmann et.al., 1996), anesthesia (Runciman et.al., 1993) and family medicine (Bhasale et.al., 1998). These studies highlight that good communication systems and services are very important pre-requisite to a good health system and all efforts are needed to improve on the same.

### **Scope and purpose of this thesis-**

This thesis aims to study various aspects of communication and its failure between osteopaths and other specialties in medical institutions. As discussed in the previous section, communication is more prone to be ineffective and poor when it is related to osteopath stream. More professionals are taking up osteopathic a specialty and people are becoming more aware of the field. As a result, many patients now visit osteopaths without referrals from a general physician. Rests of the patients come after being referred by general physicians. Hence general and complementary health-care professionals deal with the same set of patients quite often. This increases the importance of communication between osteopaths and general health practitioner.

This thesis outlines various communication techniques that would help in minimizing medical errors amongst various medical professionals in general and ones involving osteopaths' particular. Medical teams that do not respect, collaborate and trust each other cannot treat a patient effectively and with efficiency. Miscommunication between general health physicians and osteopath can lead to fatal mistakes that can even prove life threatening for a patient.

This study identifies major reasons that lead to communication failure between various medical teams and osteopaths. Researchers from various medical fields as well as osteopathy have suggested various ongoing initiatives that would help in development of cooperative, rather than competitive environment between various specialties in a hospital or a medical institute (Rosenstein et.al., 2005). This study also includes opinions of various osteopaths when it comes to interacting with various medical staff and analyzes the problems that osteopaths face while dealing with other medical specialties.

### **Research questions:**

Author conducted a organized research to determine various major factors that can lead to the communication failure between osteopathic stream and other related medical specialties. Aim of this research is based on to avoid disastrous consequences that can be life threatening for the patients because of mis communication between different medical departments due to negligence of medical documentation. Main aim of this research is to focus on the following points:

- Is good communication between osteopaths and other related medical sub specialties a professional requirement or it is just a hype created by the patients and media?
- Does competency in communication skills among osteopaths need to be addressed?
- What are the importance of professionalism and the duties of good communication in medical field?
- What are the causative factors that are related to the miscommunication between two professions?
- What are the consequences of communication failure between pediatric osteopaths and general medical professionals?
- How to design an effective preventive strategy to address the communication failure problem.

- Is there any gender related strategy that male or female osteopaths use in communication with their patients or with their colleagues from the different medical departments?
- Does language act as a barrier in the effective communication between patients, doctors and different medical specialties?
- What is the contribution of patients and resident medical faculty in language acquisition of new osteopaths and how does it affect communication between them?
- What are the effects of cultural differences and foreign language on the communication system?
- What are the different types of communication phenomenon and problems are encountered by the foreign osteopaths and the related medical specialties?
- Is there any effect on the interaction process, if osteopath belongs from the different cultural background and in spite of this fact he becomes dominant during communication with patients and other medical specialties?

### **Thesis organization:**

This thesis is organized as follows. It consists of following 8 chapters:

Chapter 1: Introduction- In this chapter author presented the background of the research project. Main purpose of the thesis, its different scopes and specific research questions has also been elaborated by the author in this chapter.

Chapter 2: Literature review- In this section few basic aspects of communication in the context of osteopathy and other related medical specialties have been discussed. This chapter also represents the fundamental overview of different aspects of communication. Author has also presented the literature related to the embryology and anatomy to enlighten various aspects.

Chapter 3: Research methodology- In the research methodology section, author has summarized all the data that provide the basis for this thesis, theoretical framework of the study and different methods used to analyze them. An overview of the structure of the studies utilized in this thesis, various modes of data collection, participants involved and data analysis methods have been described in this section.

Chapter 4: Discussion- In this section, a brief overview of the complete thesis has been presented.

Chapter 5: Conclusion- In this section, main findings of this study has been summarized by the author.

Chapter6: Implications- In this last chapter, few implications and recommendations for the future studies have been proposed.

## Literature review:

### Introduction:

In this thesis author explored the communication and collaboration of osteopaths and different other medical specialties. This literature review has been organized in different sections. Detailed description of the importance of communication with studies supporting this fact, a model for the Interdisciplinary Collaboration, literature review regarding segmental anatomy and theoretical framework behind this project has been elaborated by the author in this section. This section closes with the examination of the literature on communication and collaboration between osteopaths and other medical sub specialties.

For the identification of various factors influencing communication between osteopaths and other departments, author performed an extensive literature review. In this process he adopted both electronic and manual methods of data collection. Several sites and literature databases were explored for authentic and relevant information in this context. Main databases used in this literature review are:

British National Formulary

CINAHL

Cochrane library

Intermid

Journal citation reports

Medline

Pubmed

NHS evidence

Oxford reference online

Science direct

Trip database plus

Web of science.

Author compiled the resources and limited his area of literature research and journal articles in the English language. Published articles that were in the form of letters, editorials, opinions and reviews were excluded from this study.

Key words used in research were:

Communication, communication barrier, interprofessional communication, interdisciplinary communication, medical errors etc keywords were used for the search of relevant articles. A broad search strategy was used because restricting to keywords yield only a less number of studies to be reviewed.

Combination of key words used in each sources were:

1. CINAHL:

Factors affecting communication and its evaluation

Role of communication and consequences of its absence.

Interdisciplinary communication.

2. Cochrane:

Interdisciplinary communication in title.

Role of communication and evaluation of causes of its absence in title

Interdisciplinary communication and associated factors in title

3. Pubmed:

Interdisciplinary communication in title.

Role of communication and reasons of its absence in title

Interdisciplinary communication and associated factors in title

4. NHS evidence:

Interdisciplinary communication

5. Science direct:

Role of communication

6. Trip database plus

Importance of communication and factors associated with its promotion.

Factors reducing barriers in interdisciplinary communication

7. Web science:

Interdisciplinary communication and its effects in the field of pediatric osteopathy

Interventions associated with promotion of communication

8. Oxford reference online:

What are the factors which promote communication exercises in the medical field?

Interdisciplinary communication and its advantages

9. Intermid

Communication practices and its promoting factors

Communication and its effects on health of patients.

10. Journal citation reports:

Interdisciplinary communication.

11. British National Library:

Role of communication and its promoting factors

Factors helpful in overcoming barriers of effective communication.

12. Medline:

Communication and its effects on the health of patients

Interdisciplinary communication and its promoting factors

Pros and cons of communication and factors associated with its promotion in the modern society.

### **Association of osteopathy with segmental anatomy and embryology:**

Several investigations have been conducted to disclose the association between osteopathy and segmental anatomy. According to the researchers, interconnection between different body systems is too crucial for osteopathic treatment plan (Parsons & Marcer, 2005). Thus osteopaths should have basic knowledge regarding segmental anatomy and embryology of human body. When all parts of human body are in alignment, our body functions in an appropriate manner otherwise various disease process start erupting.

## Segmental anatomy and embryology of musculoskeletal system:

Description regarding various segmental connections of human body system is as follows:

Paraxial mesoderm differentiates into somites and somitomeres, bilaterally. After this differentiation mesodermal layer gives rise to three regions.

- Dermatomes - This is present laterally and migrates to form the dermal layer of the skin.
- Sclerotome - This region is beneficial in the formation of most part of axial skeleton. For example vertebrae, ribs and base of the skull.
- Myotome – Myotome is beneficial in the formation of skeletal musculature. Muscles are formed by the merging of adjacent myotomes.

For the innervations of myotomes and dermatomes, nerves make connection with the adjacent structures. As myotomes and dermatomes migrate to different areas for the formation of adult structures, nerve supplies accompany them to innervate the concerned segment. For example recurrent laryngeal and phrenic nerves travel for the long distances to innervate their far away migrated targets.

1. Skin – Skin consists of 2 different layers: Dermis and epidermis.
  - Dermis – This layer arises from the dermatomes (Mesoderm of somites). Each individual dermatome contributes in the formation of a continuous layer of the skin. This layer of skin is innervated by a single spinal nerve. Adjacent dermatomes overlap with each other and thus a localized area of skin forms which contains two or more than two dermatomes. This area is innervated by the related spinal nerves and finally two or three spinal nerves supply this localized area of skin.
  - Epidermis – Epidermis arises from the ectoderm and mainly comprises of different hair follicles and glands. Melanocytes also present in the epidermis and form by the neural crest cells. Few neural crest cells migrate into ectoderm and give origin to melanocytes and other cells give origin to tactile disc receptors.
2. Muscles – All muscles originate from the mesoderm except for the muscles of iris. Iris muscles originate from the ectoderm of optic cup. Splanchnic mesoderm gives rise to cardiac and smooth muscles. Skeletal muscles of the body arise from paraxial mesoderm. Paraxial mesoderm gives rise to somites and somitomeres (In the rostral region of head).

Myoblast cells of skin originate from the mesodermal cells of the myotome region of each somite. These myoblasts cells fuse to form multinucleate cells that synthesize myosine and actin. These cells are striated in appearance.

Innervations are required for further muscle development. Continuous tension is required in the muscles and tendons for proper growth and development. Muscle cells are of different type and these types are determined by trophic molecules released from the muscles. Muscles also release trophic molecules that affect nerve growth. Muscle cells are of three types I, IIa and IIb.

3. Bones – Bones of the human body originate from the paraxial mesoderm, somatic mesoderm or ectomesenchyme. Thus most of the bones are of endochondral origin but bones of the calvaria and face are formed intramembranously.
4. Joints – Mesenchymal condensation produces an interzone region in the perichondral tissue, which connects adjacent cartilage models of bones. This interzone can become fibrous connective tissue or fibrocartilage or a synovial cavity according to the nature of joint.

Above description is very beneficial for the planning of osteopathic treatment. Apart from the segmental anatomy and embryology information communication patterns between osteopaths and other medical specialties are also very important for the success of treatment and health of the patients. In the next section, author is presenting different communication patterns existing in osteopathy.

### **Communication patterns in osteopathy:**

Investigations regarding identification of different patterns of communication in the medical sector have been performed by various investigators. According to Bronstein, collaboration is a higher level of service than a coordinated, interdisciplinary communication process (2003). Model presented by Bronstein in this context is as follows:



Author performed thorough literature review of studies, indicating towards different patterns of communication between osteopaths and other hospital staff. This type of study was conducted in United Kingdom (Coiera E et al, 1998). In this study communication patterns between 8 physicians, 2 nurses and numerous health care professionals were explored. Major concentration of this study was on communication between osteopaths and their assistants. Results concluded that assistants initiated approx 16 to 17 different patterns of communication and this communication pattern was biased towards synchronous modes of communication. In synchronous communication patterns direct contact with the other person is performed but in asynchronous communication patterns various intermediate resources like phones, fax, emails, notes or voice messages are utilized.

A similar kind of study was performed in Australian hospitals and results concluded that osteopaths and other clinicians spent more than 80% of their time of treatment on patient in communication process. Their mode of communication is mostly synchronous (i.e. they perform face to face interactions at most of the times.) (Coiera E et al, 2002). To identify communication patterns in the operating rooms, an investigator conducted a randomized study and he concluded that health practitioners who are the in charge of various emergency services and operation theaters, they prefer face to face interactions mostly. To ensure proper health of the patients in these life threatening situations they maintain synchronous communication to help in the patients' critical position (Moss J , 2001).

Results of the available literature material in determining the patterns and integrity of communication indicates that approx 30% of all communications performed between osteopaths and other medical specialties are interruptive and approx 10% of communications are performed in a multitasking pattern (Coiera E et al, 2002). Apart from these studies, few other studies have also analyzed by the author and results of all these studies indicate that a higher degree of multitasking and interruptions were present when performing these health care communication between osteopaths and other staff like nurses, physicians and other medical specialties (Coiera E et al, 2002; Chisholm CD et al, 2000; Chisholm CD et al, 2001).

## **Research methodology:**

## **Introduction-**

In this section author is presenting research methodology of study. Aim of this research methodology is to explore the role of communication in osteopathic practices. In this chapter author will enlighten the introduction, aims of this research, theoretical framework, research paradigm, research design, reliability and validity of study, ethical considerations and finally conclusion of this research work.

## **Purpose of the research-**

Objective of this study is to evaluate the trend of communication pattern between osteopaths and other health care professionals. Along with the evaluation, author also attempted to determine different effects of communication absence on the health of patients. He recommended different strategies required for the promotion of communication in the health sector. To achieve the major aims and objectives of this study, this research attempts to execute a fair and transparent process of investigation.

## **Research Paradigms-**

In this study, author has enlightened the reasons of using different methodologies. Mainly qualitative and quantitative research methodologies have been utilized in most of the research works and author has presented the evidences in the support of each selected hypothesis.

Combined approach is more useful than using both methodologies separately (Kanbur and Shaffer 2006 and Hulme and Toye 2006). It can also be categorized as a philosophical intention for dealing with a research project. According to Rolfe and Siraj – Blatchford, research paradigm consists of mainly 3 three elements. These elements are:

1. An impression about the nature of the assembled knowledge.
2. Next element which constitutes the paradigm is the methodology.
3. Predesigned criteria for the validity of the research work forms the third constituent of paradigm.

Relatively few studies fall at extreme situations where neither disciplines nor methodologies can be identified as useful (Stutzer 2004 and Kingdon and Knight 2006). In this study, author has

opted mainly quantitative research methods, but the basic information regarding both type of methodologies are as follows:

Qualitative research methods can be defined as, “group of actions, which are capable in producing those findings and conclusion, which are not arrived by various means of statistical procedures or other quantification techniques.”

To explore the poverty traps and social exclusion mixed approach is beneficial (Adato, M, 2006). These approaches are helpful in understanding the complete arena of different human experiences and suggested that “reality is socially constructed” (Mertens 2005:12).

Another mode of research methodology is quantitative method of data collection. In this technique, real events are considered as stationary, evident and quantifiable. In contrast to qualitative research methods, quantitative techniques are related to positivity for the concerned research. Quantitative methods require the characteristics of successful prediction and ability of generalization of findings in the researcher. In this method, data are collected numerically and then an analysis is performed in the statistical manner. Depending upon the requirements and type of research conducted, any one of these (qualitative and quantitative) research methodologies can be utilized, but in few cases a combined approach of these 2 methods in the same project, can be used to achieve desired outcomes.

Data collected through the quantitative research methodology is basically objective in nature. Objective nature of the gathered data is responsible for the higher degree of validity and reliability in the outcomes of the study.

Thus in this study, quantitative research methods are used as supplement for those situations where qualitative research methods were insufficient to produce desirable results. Sequencing is the most frequently used means of mixing approaches to achieve the best results (Baulch et al, 2006).

### **Research Design:**

Research design adopted by the investigators for this study is descriptive in nature. Quantitative mode of data collection was adopted by the author for the field survey. Field survey can be defined as the process of acquiring detailed information related to the general picture of circumstances, without utilizing the entire population.

## **Research instruments-**

Different types of research instruments are beneficial in acquiring information through quantitative and qualitative research methodologies. A brief overview of these research instruments are as follows:

In qualitative research methodologies, interviews are useful as research instruments. Qualitative interviews are capable in fulfilling the purpose of primary strategy which can be used for data collection or this method can be used in conjunction with observation, analysis of the various documents or in other techniques.

In quantitative research methodologies, questionnaires are useful in acquiring information. To evaluate the importance of questionnaires in conducting research, several authors have presented their different views. According to them, quantitative technique of research methodology is known for its flexible nature, thus to maintain this feature, appropriate modifications can be devised in the framing of questions to focus attention on the areas of special importance or to exclude questions which are found to be unproductive with respect to the objectives of the concerned research.

## **Data collection –**

The Data collection method is a questionnaire. Following information is collected from the questionnaire:

- Different etiological factors that is responsible for the communication failure between osteopathic practitioners.
- Hurdles in the pathway of mutual understanding and proper communication between medical departments.
- Drawbacks of the miscommunication between osteopaths and general health professionals.
- Preventive strategies to reduce chances of communication failure between different medical streams.
- Interventional programs to promote collaboration and communication between different streams.

In this study, author conducted questionnaire surveys among different participants. Questionnaire included in this study has been designed by the author particularly to encourage patients' feedback and remarks. Ethical problems have been taken into consideration in this questionnaire. Any other questionnaire is not published in similar shape in the past and this is the original work performed by author. Formulation and execution of this questionnaire on the different participants has been done by the author only. Author also emphasized that he will never depersonalize the feedback and withholds the identity of any individual contributing to the questionnaire, with exception to persons who particularly request the disclosure of their identity. Author can elucidate the importance of questionnaire and this research to the participants by explaining them the core of this work and various positive outcomes that will exert a long term effect on the medical standards. He can provide the knowledge regarding the way care takers make entries to the patient's medical records. This can offer insight into the basis of failure in communication between consultant pediatric osteopaths and other medical professions.

### **Sample description-**

Author decided to include 1000 participants in this survey. After thorough literature review and interpretation of available facts he decided to include a sample of osteopaths. Question sheets were distributed among them and the responses of selected individual prepared the background for the further strategy. Author wanted to avoid any wrong data, improper answers or any other misunderstandings thus he limited his attempt of questionnaire only up to 1000 people. Medical practices have a mix of male and female health professionals, and there is a good representation of both genders in the sample.

### **Data Analysis-**

To gain exact knowledge regarding the prevalence of communication failure problems in the osteopathic health sector, author analyzed all the available records to obtain insight related to the extent of the problem and to know the corrective measures employed by the administration in this direction.

Documents reviewed included interdisciplinary records, referral charts, follow up lists of the patients and other related documents usually maintained by the osteopaths. Information gained through different documents was utilized as supplement data in this research.

Before analyzing the data, validation of gathered data was undertaken. It was then edited and coded. During validation, questionnaires were checked for any discrepancies, completeness and whether enough samples were obtained for proper analysis. The ones containing errors, incomplete information were removed as were the ones that were not legible.

Analysis of the data acquired after successful questionnaire survey revealed that 600 osteopaths out of total sample of 1000 follow proper communication practices. This has shown a remarkable difference in the patient satisfaction level and overall health of the patients of these practitioners.

### **Validity and reliability of study:**

Validity of the contents used in any research work can be determined by proposed expert judgments. Instruments used in this study were effectively judged by different health care professionals and supervisor of this study in terms of the appropriateness of the content and for the determination of those areas who needed modification to achieve desired results. These experts determined that whether the items prescribed in the questionnaire is capable of adequately representing all those areas which needed to be investigated. Reliability of the selected tools (questionnaire) for this research was also examined.

### **Ethical considerations:**

Ethical considerations were pertinent in context of this research work because of the nature of the problem involved, various methods used for the collection of data and different participants involved in this research project. This aspect is at times ignored by researchers, but it forms a very important part of the research process.

- *First, some of these norms promote the aims of research, such as knowledge, truth, and avoidance of error.*
- *Since research often involves a great deal of cooperation and coordination among many different people in different disciplines and institutions, many of these ethical standards promote the values that are essential to collaborative work, such as trust, accountability, mutual respect, and fairness.*

- *Many of the ethical norms help to ensure that researchers can be held accountable to the public*
- *Ethical norms in research also help to build public support for research.*

### **Conclusion:**

In this research methodology, author provided detailed information about the data used in the thesis and collection and analysis methods, including ethical issues and problems with the data collection process. In addition, the participants of the study and the criteria for their selection were presented.

## Discussion:

Various reasons as well as consequences of communication failure amongst osteopaths and other medical specialties were highlighted in this thesis. Along with these reasons, author has also described the importance of segmental anatomy and embryology of human body in osteopathic practice. From the communication point of view and correct diagnosis of various ailments, it is imperative that various departments have effective communication with each other. Various studies around the world have indicated the importance of effective interdisciplinary communication in hospitals. Examples of these studies:

- Department of National Center for Patient Safety in US did a research and concluded that 75% of close call and adverse cases were due to ineffective communication between various disciplines (Salas et.al., 2009)
- In Australia's Queensland, 20% of sentinel events in 2005-2006 were due to communication failure between various medical departments (Wakefield, 2007)
- Australia's Victorian public health concluded in 2008-2009 that 20% of sentinel events were caused by ineffective communication amongst family, medical staff or/and due to language and cultural barriers between various stakeholders (Department of Health in Victoria, 2009)
- Joint Commission of USA reported in 2007 that out of all serious events, 70% were due to poor communications between various departments.

In various other studies around the world, it emerges that communication failure is always one of the major reasons of sentinel events, which could have been avoided.

It is essential to understand what constitutes effective communication and the strategies to develop the same. In case of medical staff, it means developing an understanding about a situation that is shared between all the parties. Communication skills including goal setting, assertiveness, negotiation and listening are all important in this context. Murphy et.al. (1997) laid down the following five standards that define effective communication:

- **Complete:** All queries related to the patient should be answered by medical staff to the satisfaction of the patient and his/her family and friends. Similarly all the information

from patients and family to medical staff should be complete. Incomplete and inadequate information could lead to confusion that may hamper the medical procedure.

- **Concise:** While complete information is essential, lengthy explanation that is not required as well as unnecessary repetition needs to be avoided. Information needs to be passed in a manner that is concise and easy to understand. In case of medical care, where information can be huge and very detailed, format of the information becomes crucial to understanding. Essay type of description might be confusing, while use of charts and tables would be much more effective in communicating the background information.
- **Concrete:** Information being communicated needs to be specific and considered, while all facts should be checked for accuracy. This would reduce the errors and improve efficiency.
- **Clear:** Communication should be made clear by using short, familiar and conversational words. In case the parties communicating are from different backgrounds, they should communicate in a language easily understood by everyone.
- **Accurate:** Ambiguous language needs to be avoided. Information passed should be double checked for accuracy and various processes should be developed in order to avoid any mix-ups and confusion.

The points discussed above would be useful in a medical setting because of the following reasons:

- Safety of patients would be improved
- Quality of care as well as outcome of treatment would improve
- Length of stay in hospital for a patient would reduce. While this would be mentally, physically and financially less draining for the patient, it would also free up health care resources for additional patients.
- Satisfaction amongst patients and their friends and families would improve.
- Staff members are also going to benefit in terms of better morale and higher job satisfaction.

It is also essential to understand the factors that might lead to ineffective and poor communication amongst various parties. These are:

- Fatigue and stress amongst healthcare providers is very common and is amongst the highest amongst various professions. Staff morale, attitudes and memory failure all play a part in the communication becoming ineffective.
- Various professional and personal distractions can lead to interruptions during work for medical staff and this might break the flow of proper communication.
- Continuity in functioning of a hospital is broken during change in shifts. Lack of documentation and good handover can lead to lack of information for effective treatment of a patient.
- Cultural, gender and social difference between medical professionals and patients can lead to confusion during communication.
- At places that is too hierarchical and where juniors are reluctant to question seniors, information sharing might not be effective.
- Doctors, nurses and other professionals might have different trainings and backgrounds. Also, new research and super specialization courses mean that there are differences in knowledge level of various staff members. This can potentially lead to ineffective communication, as what might be obvious to one can be something new for another.
- In case workload of medical staff becomes high, they might avoid documenting things in detail. This might lead to poor communication.
- A health professional has a responsibility of many things apart from attending to patients. This includes academic and administrative work. A person not used to multi tasking can find it difficult to get time to communicate effectively in various situations.
- Lack of shared vision and what needs to be achieved can lead to ineffective communication
- Organizational culture of some firms including hospitals is rigid and do not encourage open communication. This permeates to all the employees.
- If the roles and responsibilities are not defined properly in an organization, there is bound to be confusion and lack of communication. Proper defining of roles is even more important in case where multi disciplinary teams are involved (Leonard et. al., 2004)

Employees in any organization work at three levels – organization, team and individual. Common goal and good synchronization between these three levels would lead to effective communication in an organization.

- 1. Individual:** As discussed in the preceding points, individual factors including attitudes, memory failures, distractions, fatigue and stress levels can lead to poor communication amongst health care professionals. Individuals can overcome this and develop effective communication by developing active listening skills, learning art of negotiation and improving assertiveness. It is essential of a health care provider to be assertive in case he or she thinks something is not in the best interest of the patient. This should take place irrespective of the organization structure and rank. Pickering (1986) highlighted the importance of the same by concluding that being assertive without inattention or aggression leads to better patient care and safety.

Negotiation involves health care professionals inculcating the need for good communication as well as various style of communication. They also need to value their colleagues from other disciplines and manage conflict, should it arise, in a amicable way with a good interaction. Health care takers should have an open mind while listening to others, even if they don't agree with something. Active listening is also essential to make a patient feel at ease.

- 2. Team:** In a hospital, providing health care involves multiple people and sometimes multiple specialties. Good communication within a team and across teams becomes essential in such a situation, since multi disciplinary teams would have different skill sets as well as technical expertise. Communication styles might also differ. Development of skills for the entire team is essential to improve communication within a team as well as across various teams.

Various researchers have concluded that improvement in communication leads to increased efficiency in teams, fewer and shorter delays, reduced stress among employees as well as improvement in morale and job satisfaction (Oandasan et. al., 2006)

- 3. Organization:** Organization culture is one of the most prominent factors impacting communication within and across teams. This is true not only for a health care organization, but an organization in any other industry. Various factors essential to facilitate open and effective communication are: trust and transparency, assertiveness and

leadership. It is also important to put in place communication processes and technology to facilitate communication. The Joint Commission in 2005 highlighted that following characteristics are required in an organization looking for implementing an environment that facilitates improved communication

- a.** Organizations need to teach employees the importance of effective communication. A direct and clear link between patient safety and teamwork with effective communication would encourage everyone to take this seriously.
- b.** An organization should define roles of each employee in promoting communication and should designate champions to promote the importance of open communication.
- c.** Communication processes need to be aimed at achieving improved patient safety and improvement in quality of care.
- d.** An organization serious about improving communication should foster and promote a culture that includes environment of collaboration, respect for each other, cooperation, teamwork and openness.
- e.** An environment of trust and ease needs to be created that encourages everyone to speak openly, especially when it is related to patient safety. A person should be encouraged to speak openly irrespective of his or her rank or designation.
- f.** Various organizations have different set ups and needs. Hence, they should identify communication strategies that would suit them best. An audit should be conducted identifying pros and cons of current system and requirements of new system should be identified.

This thesis adequately identifies communication strategies that would help reduce errors in medical institutions and hospitals. Teams that do not communicate openly with each other, while collaborating and respecting each other cannot provide efficient service for patients. Miscommunication amongst various medical teams and osteopaths can lead to delay and mistakes in decision making. This disconnection can be very dangerous for patients and can prove to be life threatening in some situations.

## **Implications:**

Author has successfully analyzed the pattern of communication between osteopaths and other medical specialties in this study. According to him, few taboo topics should be avoided to enhance communication. For example delivering bad news to terminally ill patients or their families in China (Tse et al., 2003), etc. After this analysis he is proposing few recommendations for enhancing this irregular and miscommunication between different medical departments. Major recommendation in this context is related to the training and education of medical professionals to attract their attention on the importance of this topic. According to few authors, properly organized and effective intercultural training of professionals has an overall influence on the cognition and behavior of them. Recommendations proposed by author in this context are as follows:

### **Role of appropriately designed training sessions for the promotion of communication process:**

Teaching and training can play a big role in improving communication between osteopaths and other medical staff. Before starting on any training program, it is essential to highlight to various staff members the importance on communication, emphasizing that to communicate effectively with colleagues, not only medical knowledge is important, but communication skills play a big role as well. Poor communication can negate excellent medical knowledge if one part is unable to express his or her views properly. To avoid sentinel events, learning should be converted into actions regarding communication process ( Wakefield, J. (2007).

Chen and Starosta (1998), highlighted that proper inter and intracultural training can positively influence a person's behavior, affect and cognition. With regards to cognition, staff members are expected to develop better understanding of diversity and each other's point of view. The training is also expected to broaden their attitude and take cognition of complexity underlying their own and other people's cultures. Affective cultural training leads to better adjustment of stress related to cultural differences. With regards to behavior, staff members can expect better relationship with people belonging to different cultures after the training.

Training course for medical professionals need to include both general and specific knowledge. General knowledge needs to include some communication knowledge, knowledge of theories of communication research, examples of various situations that arise in intercultural interactions,

issues of discrimination and prejudice, identity, emotional challenges, power, ethical aspects, stress and anxiety, leadership and conflict resolution. A review of language problems along with examples can be very relevant as well.

Specific knowledge in this case would comprise of various social activities in which medical staff would participate. These social activities can include communicating with people from different medical teams, lunch and coffee breaks, hospital rounds and medical consultations. For staff from outside the country, specific knowledge would also include an introduction to the culture of the host country and for local staff, it would include introduction to the culture of various staff members. Course organizers should acquire background information about cultures of various participants and use this information to prepare their sessions. As mentioned earlier, emphasis has to be on emotional challenges such as conflict management, anxiety and stress as well as cultural shock that is very prevalent in case on intercultural interactions.

#### **Role of practicality in communication process:**

A mentor should be provided when a non-native starts working in a health care institute. This mentor should be someone who has knowledge of both the cultures. This way the mentor would be able to assist with the language problems as well as introduce new professional to the workplace. Introduction to various routines, tips on how and where to find information related to different topics and detailed overview of the health care structure of the home country would be very beneficial for a new member coming from outside the host country. In intensive care units, proper communication is very important (Zimmerman JE, 1994, 1993)

#### **Language related recommendations**

Language training for an un-initiated medical person should include the vocabulary and slang used in everyday healthcare practice. Non-native staff needs to be aware of the various points and these points should be included in the training courses as well. First and foremost important point is the use of native language. Professionals should have adequate knowledge of local equivalents of different medical terms. It is essential to talk to the patients and other medical professionals in the native language. This makes communication much smoother and effective. Other point is the tempo of speaking. While interacting with a person from a different background, the staff should remember to speak clearly and slowly. This is essential for mutual understanding as speaking rapidly, combined with accent might make it difficult for people to

understand each other. Linguistics of doctor- patient communication is very important for treatment success (Wynn, R.; 1995).

Listening skills also play very important role in the success of practice. People need to be trained to listen carefully to what their colleagues are saying. Interruption may lead to missing out on vital information that might be necessary for right treatment. Moreover, interruption in many cultures is considered to be impolite and may leave a bad impression on a colleague and this would also impact future interaction with that person. They should make efforts to understand what is being said. If something is not clear, there should be no hesitation in asking again. While this might be inconvenient, it is always better to ask again rather than make mistakes. This is very important since mistakes are even more costly in medical field. At the same time, native speakers need to be patient and understanding while communication with non-native staff.

It is important for non-native speakers to grab opportunities to practice their interaction skills. Non native staff should be given opportunities to visit workplace during the language course so that they can learn various routines.

### **Communication styles related recommendations**

Communication failure is a common cause of mishaps (Sutcliffe K, 2004). Different cultures have different styles when it comes to conflict avoidance. Some cultures give preference to conflict avoidance and has indirect communication style. This can be confusing for people coming from culture used to direct communication styles. Various cultures also have different views when it comes to hierarchy and power distance. Pediatric osteopaths who come from a country where power distance is large to a place where it is narrower might find difficult adjusting. They would expect more respect from nurses and junior staff and they might lead to problems at the workplace.

Gender roles can also become a point of contention, (Tannen, D. (1990; Teleman, U, 1999). Various societies have different views of “equality” between men and women and a pediatric osteopath shifting to a new location needs to be aware of this. Implying that women are subordinate in any sense can cause huge conflict in many western cultures. There can also be huge difference in the way public and private life is managed in different cultures. Most of the western countries are individualistic where people take care of themselves. Also, very often

professional friends may not want to be friends outside the medical institute and this may lead to feeling on loneliness for medical staff shifting from some other country.

Lastly, there are always some eccentricities of a culture that might be difficult to explain, but can lead to stress and misunderstanding between staff from different cultural backgrounds. Medical staff should be trained to be more careful and open minded when interacting with people from various backgrounds.

## **Conclusion:**

In this study, author conducted a survey on different osteopaths and after thorough analysis of the questionnaires and different recordings he concluded that effective communication between osteopaths and other specialties is very essential for the success of the prescribed treatment and for the sake of the health of patient. Author has also stated different segmental anatomy and embryology related to the human body. Thorough analysis of the anatomical structures will be proved very beneficial for osteopaths in planning treatment for different patients. Detailed literature review regarding importance of communication concludes that in osteopathic practice communication between medical specialties and within the group osteopaths is too critical for the safety of mankind.

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