

# DIFFERENT TYPES OF MEDICINES AND MEDICAL DEVICES DOCTORS USE IN HOSPITALS DURING TREATMENT

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#### **ABSTRACT:**

**Objective:** The main purpose of the study is to look into the position of medical devices, doctors use to diagnose and treat any disease. They use the specific type of devices to treat many diseases and in the use of medicines.

**Methodology**: Researchers collect different types of databases to calculate the value of these medical devices. They take approximately 5 years to complete this study. They properly investigate the devices which were used for the treatment.

**Results**: They consider about "3,756" articles, which were related to the use of different techniques for treatment. These articles were related to both clinical and hospital bases. But just 775 articles were related to medical devices. About, 556 articles were mismatched with medical devices and treatment. They were not showing any relationship with the treatment or diagnosis of disease with the help of these devices. Scanners of both type MRI and CT, X- rays are the devices which they use for treatment. Another equipment which was used during study was acupuncture device or equipment. Stimulation of nerves and other types of therapies were also used.

**Conclusions**: This study shows us how they use medical devices during their treatment and practicing. They provide full information related to this study. Researchers consider all types of changes they notice in the medical field with the passage of time.

**Keywords**: Diagnostic treatment, devices, database, research.

#### **INTRODUCTION:**

Medical device or instrument is described as any type of material or product which is used to treat or diagnose any disease [1]. These devices help to diagnose the disease and then help to treat it, it allows us to cure, diagnose and treat any type of disease [2]. They check the rate of growth from 2010-2014 and measure results which range between 10-11% [3]. Medical devices are going to produce in rapid amounts and help us to treat several diseases. At the time, doctors used a stethoscope to check their patients, but nowadays, they introduce us with different types of tests and medical devices to treat their patients [4]. They introduce us with unique types of medical devices such as Scanners, ultrasounds, and many other medical devices [5]. There are many reasons to adopt unique and effective methods of treatment among doctors [6]. If we study traditional treatment, different types of herbs and plants are used to treat patients. They use therapies related to traditional treatment in the past [7]. Now doctors start introducing new devices such as acupuncture techniques, graphic representation and treatment. Multiple types of



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scanners and machines are in use by doctors [8]. X-ray machines are also introduced and used in the medical field to check the bones and other medical problems [9]. Conventional types of medicines are now having alternatives with traditional types of medicines which includes herbal and plants used for the treatment of several diseases [10]. As resources increased, doctors started using different types of unique instruments and machines or devices to treat severe problems of patients [11]. They perform different surgeries on the basis of medical devices. In the past, Pakistani doctors were using traditional types of medicines to treat patients, but with the passage of time, their priorities and the method of treatment changed [12]. Now they are doing different medical tests in their hospitals and treat their patients with respect to the results of these tests [13]. They perform tests such as the checking blood level and its count in the body, analysis of urine and some aspects of radiography also included [14].

Variation was shown in the doctors who are giving herbal medicines and treatment to their patients [15]. In this study, we discuss both the conventional type of medicine and traditional type of medicine, but there is not proper research on this topic [16]. Research does not pay attention to this side of the medical field and shows less response this topic. In this study, we mainly discuss the accurate and present behavior of medical research based on traditional types of medicines and its effects on humans [17]. They first study and then analyze the data to get an accurate amount of results. They analyze that data by performing different numbers of tasks and also come up with references. It helps to establish the traditional type of medicines and policies in those specific countries who are working on this system of medicines and surgeries [18]. Some specific types of countries are showing higher use of this type of medication.

## **METHODOLOGY:**

In 2016, we performed about 6-7 databases to collect information of traditional type medical studies held in the last 5 years. Researchers collect different types of databases and add it in studies to improve its value. Different databases including PubMed, Research articles and many other sites were included. Alternative types of medicines were also used in some parts of the countries as compared to comparative types of medicines. In traditional medicines, they also use these two types of methodologies and treatments. Lots of researchers were held to initiate the use of traditional types of medicines and introduce unique methods of scanning, X-rays and tests to treat patients. In this study, researchers also excluded some specific types of languages which were not common among people of the world. He also excluded the special language of doctors because it will be difficult for common people to understand. This study was the hospital based. Researchers visit hospitals and collect information by asking questions. They make a survey related to this research and ask different types of questions which includes their level of study, based on experiments and also show some quantitative behavior of the doctors. They also ask some questions from patients to check their response towards using new methods. After asking questions from the doctors and patients they exclude reviews of some patients who did not get this type of treatment yet. They only include that type of response who meets the required criteria of that study. Some of them were those who did not receive and experience new methods of treatment and didn't get medical treatment. As we include different numbers of researchers and different numbers of doctors take part in this study, so they solve issues related to this study by making arguments and discussion on that specific topic. They clear out all the agreements and disagreements and solve all their issues related to this study. If we come to the types of medical devices, we separate them into two categories. First one is the diagnostic type of devices and the second one is the treatment type of devices. We use diagnostic devices to diagnose the cause of disease. We use different devices such as scanners, X-rays, ultrasounds, and many other tests to





diagnose disease. It helps us to know the person is suffering from which type of issue. After diagnosing the disease, we come forward to other types of devices known as treatment devices. After diagnosing the cause of disease, we search out for its treatment. It also includes different types of devices such as lasers, electric devices or needles to treat the patients. They use different methods to treat them and help their wounds to heal as soon as possible. In traditional types of medicines, doctors use different types of devices to treat their patients and help them to get rid of their problems. They first collect information about them, enlist their medical history and they diagnose their disease. After diagnosis, they start their treatment. This unique method of treatment helps patients to heal their wounds and get rid of their problems more easily. They check out and diagnose the disease or problem with the help of diagnosing devices and then move it out towards the treatment devices. Doctors use different types of devices to treat their patients. This unique method of treatment makes patients feel relaxed and trusted the doctors.

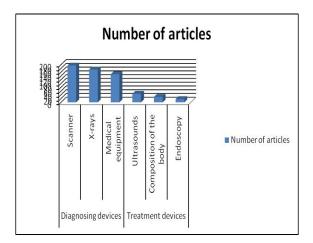
#### **RESULTS:**

Researchers include about 3750 articles in this study. About! 1348 articles were related to traditional types of medical devices and show its response. They also exclude about 436 articles due to showing mismatched results. These articles were not showing results related to this study. Review studies were also included in these articles. About 72 studies were based on experiments. 236 studies from them were hospital based and showed the same type of results. From 1348 articles, about 58% of them were showing results related to medical field or devices, and the remaining 40% of them were not showing results related to medical field or a unique type of medical devices. Traditional types of devices were further divided into diagnostic and treatment devices.

Medical devices.	Mostly used devices.	The Number of articles
Diagnosing device.	Scanner	195
	X-rays	174
	Medical equipment	149
Treatment device.	Ultrasounds	45
	Composition of the body	29
	Endoscopy	17







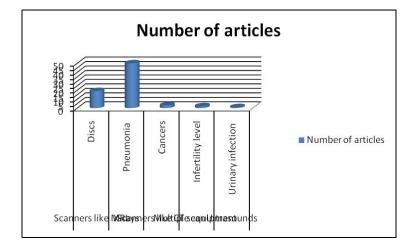
In table number: 1, they use some diagnostic type of devices used during treatment. They use these devices in the form of scanners such as MRI scan, CT scan and Ultrasounds etc. All these types of scanners were used with different percentages on the basis of results. In this type of treatment, they measure the heart beat and its rate, cause of disease and its composition. They use different types of equipment to treat that type of diseases. Medical devices were also used to treat various types of disease, and it contains about 404 in numbers. In this table, they show all types of medical and diagnostic devices to treat patients and their disease. It becomes easy to treat our patients by using these types of equipment and scanners. Most used types of medical devices are considered as scanners and Ultrasounds. These devices are mostly used in hospitals to diagnose the disease of the patients. For the last 5 years, doctors have been working on it to increase the amount of scanners and also introduce it to all areas. When everyone will be aware of its use, it will be easy for doctors of all hospitals to treat their patients by using these instruments and devices. X-ray machines are also introduced in the medical field and people are taking advantage of it. The amount of scanners and especially MRI, is increasing rapidly every year. They are also using several types of machines to measure the heart of human beings and the condition of heart. After diagnosing the main cause of cardiac issues, they start their treatment.

Diagnostic device	Top diseases	Number of articles
Scanners like MRI	Discs	19
X-rays	Pneumonia	50
Scanners like CT	Cancers	3
scan		
Multiple equipment	Infertility level	2
Ultrasounds	Urinary infection	1

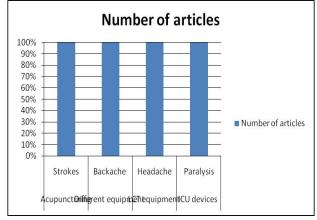


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<b>Devices for treatment</b>	Top diseases	Number of articles
Acupuncturing	Strokes	7
Different equipment	Backache	9
LCT equipment	Headache	5
ICU devices	Paralysis	2



#### **DISCUSSION:**

We discuss the use of medical devices in this study [19]. After making a study, we have noticed that these devices help us to improve the quality of treatment and health conditions people are facing around us [20]. It is related to the field of science and also linked to other fields as the electrical, mechanical and optical field of science. The area where they introduce us to the different fields of medical science and their new invention is sometimes called industry [21]. In the industry of the medical field, we see the instruments and devices related to the treatment through different types of devices which they use, first to diagnose the disease and then apply treatment devices to treat that particular disease [22]. By using these unique and modern type of methods to treat diseases, it helps us to improve the quality of treatment of certain diseases which help patients to get satisfactory results. In the field of science, we are now able to even replace the organs of the body by using different types of methods and techniques [23]. They take a survey in which they ask the different type of questions from doctors in which they ask about the use of instruments during treatment and from where they got these devices or instruments. Due to having high frequency range, these devices can not be used in small clinics or labs, hospitals use that equipment during their treatment [24]. They use different types of





techniques in which they take tests and perform scanning of patients, in this way they will be able to see the clear image of internal body parts of the human being [25]. They use these types of techniques to diagnose their disease. After diagnosing the disease, they start their treatment.

### **CONCLUSIONS**:

In this study, we do research on the use of medical devices for traditional types of treatment. We check the comparison between old types of devices, doctors use for treatment as compared to newly invented devices. All these are based on new and modern ideas and work efficiently. We come to a conclusion that now doctors are using these devices during treatment and still working on it to make it more effective. This enhanced level of devices help us to get connected with the modern world. These devices help doctors to diagnose and treat any type of disease. These unique methods of treatment help us to get rid of our problems and diseases from which people were suffering from a very long period of time. Doctors use diagnostic devices to diagnose the disease and then perform tests on them and start treating their patients with the help of treatment devices.

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