

Research Article



Patient Medical Records and Practices in Pakistan



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Abstract

A patient's medical history record holds a really important place in devising future treatment plans and making healthcare decisions. The inability to access accurate and relevant patient history can pose health problems and may even prove fatal if the wrong treatment is given. Modernity demands an automated system that can make data storage, retrieval, and analysis convenient. In Pakistan, due to the inadequacy of resources and attention, there is no centralized system for the maintenance of patient history records. Thus, there is a possibility that a patient himself/herself intentionally or unintentionally misses out on essential information that must be conveyed to the physician. This calls for a need to develop a technologically advanced solution to prevent the damages that may be caused by its absence.

Key Words

Electronic Health Records, Patient History, Patient Medical Records

Introduction

A patient's medical history plays a vital role in the evaluation of the patient (Nichol, 2021). The data record accumulated in a medical history may have grave consequences which range from lifesaving to life-threatening. The information available on patient records can be as micro as a sore throat or a mild cold to as lethal as heartache or shortness of breath due to a family history of cardiovascular diseases. In the case of physical trauma (such as head injury or stroke), childhood trauma, or PTSD, there are higher chances of memory loss due to which the patient may forget things easily. In this case, medical records already available will prove to be beneficial in case the patients forget afterwards.

Medical history or patient history is defined as a record of information or data related to a patient's health. The patient's medical history incorporates his/her personal information build-up from his/her narrative and diagnosis of the illness to medical and family history. For instance, this includes if high BP or diabetes runs in the patient's family, whether he takes medications on time, if he prefers cycling or any other sport, how many times he eats junk food, if he goes for a

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walk daily in the morning, what's his sleep cycle, is he a vegetarian or non-vegetarian, his social history whether he is married or single, what does he do for a living, does he smoke or take drugs or not, these are relevant examples to name a few.

There is a total of four components of patient history which include chief complaint, history of present illness, review of systems, or past social or family history (Nichol, 2021). The chief complaint is the reason for patients visiting the doctor. History of the present illness refers to the questions that are adding to the current state of the patient, which amplifies the pain and trouble the patient is going through. The review of the system is checking all the vitals like BP, pulse rate, and sugar level to see if other organs are in line. Usually, the data in acute treatments do not fully comprise all the components due to emergencies, time shortages, or in case of hospital crowding (as happened at the time of Covid-19) or other structural reasons (Nichol, 2021). In that case, three primary questions include the patient's general medical history, allergies if any, and medicines or treatment the patient is currently or recently been taking. This information is considered of high importance in the medical field for potentially avoiding medical error, especially in the case of a threat to life, limb, or sight.

The major focus of our study is the prior patient history, social and family history of the malady highlighted along with the patient narrative especially of the return or second visit of a patient to the clinician. Past medical history comprises operations, illnesses, allergies if any, treatments, and injuries in case of any accidents. Family history or health history shows patterns or recurrence of certain maladies in a family. It incorporates genetically passed illnesses, medical events, and patients at risk. Last but not least is the social history which contains information related to marital status, occupation, habits, smoking or drug use, occupation, and sexual history.

Patients' Medical Records

The medical system is like a human organism, but it is unstable and confusing, the confusion of medical data, patient history, cost, analyses, etc. is slowly collapsing the system. With sophisticated technological innovations, medicine is progressing by leaps and bounds but unfortunately, the patient history which is the primary foundation in diagnosis is still unreliable. A *patient record* is the repository of information about a single patient. This information is generated by healthcare professionals as a direct result of interaction with a patient or with individuals who have personal knowledge of the patient (or with both). Traditionally, patient records have been on the paper used to store patient care data.

Awareness of the patient's past medical condition helps medical professionals to avoid errors in disease diagnosis. William Faulkner (Go Doctor. n.d) said "the past is never dead", it is the past that defines the patient's health and body condition. The past medical records give a concrete picture of the medical tests, dose, and previous physician's treatment plan. By neglecting such a crucial foundation of diagnosis, the doctor could prescribe the wrong dose, neglect the previous results, order unessential examinations, or disrupt important medication, etc. The patient records are also helpful because people tend to forget the intensities and sometimes the maladies they experienced in the past. Memory of a human being is divided into three types: sensory, short-term, and long-term. Taking the information from long-term memory is a challenging task if you have no tag attached, hence, a patient might answer based on false memory or disrupted memory. This highlights the fact that a patient history record must be maintained if we want to avoid undesirable outcomes.

Let's suppose a patient undergoes a certain treatment and realizes that he is allergic to a certain specific medicine but upon changing the doctor, that information slips his/her mind, which results in a life-threatening situation. Many problems occur with patients who have some

mental health issues, for example, a patient might react to a certain therapy negatively due to past experiences.

Essentials of Patients' Records

- Demographic Record
- Record of Drug Allergies
- Record of Vital Signs
- Composite Diagnosis
- Record of Laboratory Work-up
- Radiology and Electrocardiographic record
- Current Medications
- Growth Charts
- Continuity of Care
- Others (Records for legal and research purposes)

Electronic Patient Records

Electronic health records are a solution to maintaining and retrieving patients' medical records. It comprises several interphases which comprehensively integrate information regarding complaints, diagnosis, medications, allergies, and information regarding registration, scheduling, billing, etc. Electronic health records have innumerable advantages. Not only do they enable paper-free record management but also make data entry and retrieval efficient. Through patient records, many borderline health conditions can be prevented with the help of monitoring and preventive measures. In case of patient transfer, essential information can be effectively communicated to the referred physician (Go Doctor. n.d). It also protects patients from medication errors like duplication, interaction, contradiction, or hypersensitivity (Dick, 1997).

In addition to improvement in health indicators, electronic record keeping can contribute to cost curtailment and other benefits (Dick, 1997). The collection of data can prove to be a very efficient source of data to conduct research for the improvement of health and health system and policy development. Automated Records also save resources as fewer material resources are required for its maintenance, also a small number of trained individuals would be enough to maintain the system. An additional benefit of properly maintained patient records can be obtained when there is a need for legal purposes (Bali 2011) in case of medical negligence. This also calls for strict security measures to prevent leakage and misuse of medical information.

Practices in Pakistan

A patient record could be in paper form or computerized, both have their pros and cons, but with the current environment, socioeconomic factors, and the large population in overcrowded areas, it is hard to manage the records of the patients in Pakistan. The mismanagement of the records can not only give delayed diagnoses but also wrong diagnoses, which is more time and cost-consuming. The history could be distorted because of different reasons such as some questions might not be asked from the patient and thus not recorded, data is not secured and is lost, examination or tests are not being performed, patient flux, and other barriers. The paper record

has the problem of access, retrieval, and availability. The data from stakes of paper is hard to find and secure, therefore, there is a need for an alternative in Pakistan.

There is an increasing need for electronic records in Pakistan. Although it can have its cons, it is more convenient, less time-consuming, and cost-efficient, as it can reduce labour and manage patient flux more efficiently. Nowadays, every individual has more than one patient record. This is because people visit different doctors due to a variety of reasons like, "his medicine doesn't suit me", "he doesn't check the patient correctly", "too arrogant", or "too costly", "my sister went to that doctor and she got well so I'm also visiting him". These verbatim are common among patients in Pakistan. When they change their doctor, they have the prescription and test results in paper form from the previous doctor, which might be lost, or the new doctor might not be able to analyze them. *Therefore, if we consider the hospital system as a human organism, it should have a nervous system that stores all the patient's data and transfers it into all the hospitals when accessed.*

Not at the central or national level, however, there are some institutes where the practice of electronic health records can be observed in Pakistan. These systems, however, are hospital-based and do not operate at the individual level. These include the Combined Military Hospitals (CMH) and Military Hospitals as well. The Punjab Information Technology Board (PITB) is an autonomous body set up by the Government of Punjab to introduce technological advancements in different sectors of the province. It introduced a Hospital Information Management System for the Hepatitis Prevention and Treatment Centre of Pakistan Kidney and Liver Institute. It also aimed at introducing the system at 33 district and tehsil headquarters hospitals by mid-2018. (PITB, [2021](#))

Discussion

The diagnosis of a patient depends on three foundations, history obtained from the patient, physical examination, and necessary laboratory tests. These diagnoses are then analyzed under factual knowledge and clinical expertise. The patient's medical history is influenced by his/her family, socioeconomic, cultural, and occupational factors along with past similar or different illnesses. The trust built between the patient and doctor establishes a concrete diagnosis through the patient's history and narrative. On the other hand, due to doctors' in-expertise or patients' hesitation, a consultation can go wrong forming an incorrect diagnosis thereby compromising the relationship. A well-interpreted history gives a cost-efficient, consequential, timesaving, and less hectic diagnosis. Correct history-taking leads to the right diagnosis, but through observation, we have seen that the art of history-taking is getting rusty and the skills are declining which eventually is leading to substandard diagnosis. The reason for receding history-taking procedures could be technological innovation, patient flux, cultural incompetency, etc. Now the doctors cure the disease instead of the patient, making the patient a commodity in exchange for capital. Michel Foucault (Bali [2011](#)) called it the "medical gaze", in which the doctor looked at the patient as a disease instead of a *whole entity*.

An example of the importance of patient history was shared by one of the authors.

A patient with breast cancer, who was undergoing the particular disease condition for the second time, was referred to a hospital for the completion of radiation, after undergoing chemotherapy and surgery at another hospital. At the new hospital, the patient's history was taken verbally by the physician, which itself was inefficient as the patient couldn't recall all the important information due to unreliable human memory and lack of understanding of medical terminologies.

Furthermore, it is important to note that patients do not pay attention to the particulars of the medicines and treatments, like the drug used for chemotherapy and the radiation they undergo. This can be dangerous because there is a risk of the patient losing the paper records and not recalling whether the drug used for chemotherapy for the first time was the same as the drug

used for the second time – this can be tragic for the patient. The verbal sharing of history, not only strains and pressurizes the patient but is also tiring for the physician to be meticulous about all the details to design the next treatment plan.

Another example that emphasizes the sheer negligence of the medical system in the absence of electronic health records is as follows.

A 20-year-old female patient visited a dermatologist with a complaint of cystic acne. The doctor didn't ask the patient for any previous records nor did she explain her medical history. The acne didn't subside from the doctor's treatment. The patient visited another dermatologist who diagnosed that the condition was caused by hormonal fluctuations which essentially resulted from the treatment of abdominal obstruction that the patient underwent 4 years before.

Only if there was a comprehensive patient record available, the patient would not have to suffer, physically as well as financially, to take first the wrong treatment and then the right one.

The cases shared above by the authors can help us understand the urgent need for an electronic health record system in Pakistan. The patient, in the first account, could have faced serious health threats if the medication for chemotherapy given to the patient was not compatible with the one given before. In the second case, the patient had to face health issues as well as a financial burden. Moreover, the above-mentioned cases cannot be generalized but they give a gist of how history maintenance and analysis are important in diagnosis as well as how wrong practice can be a danger to the patient as well as the doctor. The patient should be diagnosed subjectively by using objective facts. For instance, there could be a hundred reasons for chest pain, but the doctor should personalize the diagnosis according to the patient, instead of looking only at the chest pain as an illness to be cured, the doctor should concentrate on the patient, and his/her historical records to find out any latent clue to the diagnosis.

The electronic health records in Pakistan as the current system of health records in the country is not sustainable at all. For patients to get accurate treatment and medication upon their visit to a hospital, there is a need for a proper mechanism in place to store the patient's prior medical history which is accessible in hospitals and primary healthcare centers throughout the country. This will also increase the patients' trust in the medical system as the majority of people prefer to stay at home and rely on ethno-medicine rather than visit a hospital because of their prior unsatisfactory experience at the hands of healthcare professionals. Thus, a well-established system with electronic health records in place will not only improve the overall structure of medical care in Pakistan but will also encourage patients to visit hospitals more often, resulting in a decrease in the overall morbidity and mortality rate in the country.

Methodology

This article is qualitative in nature. We have conducted this research by adopting a qualitative research approach i.e. participant observation and unstructured interviews to identify the significance of electronic health records. The sampling technique utilized was convenience sampling. The interviews of patients helped in shedding light on the drawbacks of the conventional practices relating to patient health records in Pakistan to emphasize the growing need for electronic health records in the country.

Conclusion

There is no doubt that medical history holds a key position in treating a patient. This is because medical history helps in linking the acute symptoms to the patient's history which can lead to a different diagnosis than only looking at the symptoms, and by avoiding giving an allergic or wrong medication. This calls for a need to develop a centralized electronic medical record-keeping mechanism, which is frequently updated and can be conveniently transferred to other hospitals for review by other physicians before forming a treatment plan. The system should have

security checks in place to prevent any misuse of personal information. A patient's record can be traced through his/her CNIC number for convenience. The availability of comprehensive patient history can save physicians' time as well as ensure the avoidance of memory errors in a patient.

Pakistan is a developing country that requires effort to be put into the field of health. A centralized system of patient record management will not only aid in the improvement of health status but the data analysis for research and policy formation will help bring improvement in the health sector of Pakistan.

References

- Bali, A., Bali, D., Iyer, N., & Iyer, M. (2011). Management of Medical Records: Facts and Figures for Surgeons. *Journal of Maxillofacial and Oral Surgery*, 10(3), 199–202. <https://doi.org/10.1007/s12663-011-0219-8>.
- Dick, R. S., Steen, E. B., Detmer, D. E., & Institute Of Medicine (U.S.). Committee On Improving The Patient Record. (1997). *The computer-based patient record: an essential technology for health care*. National Academy Press.
- Go Doctor. (n.d). *EMR (Electronic Medical Records) In Pakistan*. <https://godoctor.pk/emr-in-pakistan/>.
- Nichol, J. R., Sundjaja, J. H. & Nelson, G. (2021). *Medical History*. Stat Pearls. Treasure Island Publishing.
- PITB. (2021). *Electronic Medical Record & Hospital Information Management System | PITB*. [www.pitb.gov.pk](https://www.pitb.gov.pk/hims_automation). https://www.pitb.gov.pk/hims_automation: