

Investigation on the Consequences of Missing Case Folder in General Hospital Gusau, Zamfara State

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ABSTRACT

Missing case folders refers to as a loss, misplacement, or unavailability of physical or digital files containing patient medical information which consist of patients' medical history, clinical investigation and final diagnosis for continuity of patient care. Missing patient case folder resulted to improper patient management, therefore patient case folder is the case indicator measuring the level of service provided to the patient. Survey research design was used for this study. The target population of this study was Health Information Managers. The instrument for data collection in this study area is check list tool. The result shows that Human Factor scale returned the highest reliability value among the individual determinants, with a Cronbach's Alpha of 0.81, denoting *excellent internal consistency*. The items within this section skill level, staff commitment, patient-staff relationships, and service delivery are closely related, indicating that respondents' perceptions of human contributions to the problem are measured consistently and reliably. The Natural Disaster Factors scale had a slightly lower reliability coefficient of 0.69, which is still within the *acceptable range*. This set of items assessed backup systems, space, shelves, and security measures in the context of natural events, and although less consistent than other determinants, it remains statistically acceptable for inclusion in the analysis. In conclusion missing patient case folder reduce healthcare quality and safety to the patient. Work experience plays a critical role in shaping staff awareness and concern regarding operational inefficiencies and infrastructural gaps that may lead to missing patient case folders. The study recommends that, there is need for management, government to providing necessary training to enhance service delivery mechanisms of Health Information Management Personnel. Good filling method should be provided to minimise missing patient case folders. Filling space should be provided to enhance the services.

Keywords: Missing; Case folder; Challenges; Human factors.

1.0 INTRODUCTION

Missing case folders refers to as a loss, misplacement, or unavailability of physical or digital files containing patient medical information which consist of patients' medical history, clinical investigation and final diagnosis for continuity of patient care, or other important documents (medications list, treatment plans, consent forms, and medical images). Patient case folders may contain critical information of three fundamental of medical practices available to primary and secondary users. Globally, loss of medical information is a serious concern because it causes ambiguous set back in medical practice, an effective filing system for paper or microfilm or other format is a critical element of a records management practices leading to proper management of patient case folder in order to prevent it from loss of clinical information, the goal of every filing system is to prevent missing case folder which has to be organize so that it will be found later for future reference to primary and secondary users. Missing case folder in every healthcare facility need to be addressed by designing, documenting, and implementing standard procedures for

classifying, sorting, and storing information to assure effective and timely retrieval (Olapojoye,2017).

In a study conducted in South Africa, Act 108 of 1996 gives the right of access to healthcare facilities to all citizens. Various groupings such as the disabled, children, old age people, pregnant mothers, and the marginalized, have the right to access free healthcare services (Harrison, 2009). Therefore, public hospitals have to contend with huge volumes of medical records due to high number of people visiting public health facilities leading to the onset of missing patient case folder.

Harrison (2009), noted that the free healthcare services led to the dramatic utilization of services, as such healthcare services workers felt that free policy has imposed additional burden on them leading to the occurrence of missing patient case folder. This has become a serious concern since records are managed manually. The overburdening of manual records systems can easily lead to missing patient case folder of the entire records. In another study conducted by Wong and Bradley (2009) found that most rural public hospitals in



Ethiopian had no standardized records keeping systems for medical records leading to a rampant missing case folder, this means that due to the absence of standardized systems, clinical information was written on scraps of paper with some medical records kept in physicians' offices and clinics.

In Africa, Ehiemere *et al.* (2017), noted that the satisfaction of patient healthcare with the care they receive from healthcare service providers depend upon which kind of service received, therefore, missing patient case folder had become one of the most important approaches to measure the quality of care receive by patient. This is because a patient's satisfaction could serve as an index for compliance and non-compliance with the care regimen. Ehiemere *et al.* (2017) therefore, to assessed patients' perception of the quality of care compare to average of time spent by the patient in the hospital, is only patient that will reveal the level of satisfaction with the care they received as regards their physical and psychological needs. Hence, patients indicated a positive mindset in the procedure and diagnostic attitudes of healthcare service providers provide, such as health information management professional, physicians and nurses, especially as regards treatment procedures. In Nigeria, Osundina (2014), opined that for better healthcare delivery system to function efficiently, it is necessary to have an organized method for storing of the health records in order to avoid missing patient case folder. Therefore, filing system can be described as a set of documents arranged in prescribed order for convenience of reference and preservation. The purpose of filing patient records is to facilitate complete and quick retrieval of patient information from them when the needs arise in order to avoid missing patient case folder. The system should expand and contrast according to future requirement, cross reference, tracer System. A tracer card must be placed in position of a removed folder to indicate the destination of the folder (Akanbi and Agaba, 2017).

Record keeping is the lawful responsibility of every health-care practitioner, and retention of medical records the duty of all health care facilities. Inadequate records keeping can compromise the health of the as well as the career of the health care practitioner. Poor medical research will in turn affect the quality of medical teaching and the quality healthcare service negatively. According to Pourasghar *et al.* (2008), it is necessary to find ways to ensure that the documentation of information will be in a readable and retrievable format. Record identification systems and filing must go hand-in-hand, as the filing system depends on the identification system used. Filing is the systematic arrangement of records in a specific sequence so that reference and retrieval is fast and easy.

Daily procedures in many areas of a clinic or hospital can be severely affected by poor management of health record services. It is therefore the responsibility of the health information professional/health record administrator to establish systems and procedures to ensure the efficient production of health records for patient care, medico legal purposes, statistics, teaching and research.

Security of patient case folders is a serious concern in every country which it can be recognized as a key better wellbeing of its citizens in the medical practice, control of patient missing case folder manually or electronically is the effectiveness of the health facilities in providing services. Health records for patients should be carefully protected because they document the course of treatment of all patients, before the adoption of electronic health record (EHR) system was introduced, patient records were organized and kept in a specific location with a records management clerk in charge to which because of some factor, patient case folder will easily misplace elsewhere.

The paper-based records were prone to mistakes due to poor security measure. Since a patient's record was dispersed throughout various departments, paper based records were readily lost. It was challenging to trace a patient's information, the clerk had to manually search through numerous files to retrieve the necessary data. Since electronic health records remained standard and absent of messy handwriting, they allowed for simple storage and access as well as to prevent occurrence of natural disaster. Despite the benefits of security measure added to a level of patient case folder. A number of other security measures must be in place in order to protect the missing patient case folder. Hence a model must be created to help execute these security measures while keeping these restrictions in patient case folder movement as well as some human errors leading a poor quality healthcare delivery (Aqsa *et al.*, 2018).

Missing case folder is one of the major issue causing in availability of adequate, timely and accurate information on patients' health records in line with standard procedures which is critical to enhanced accessibility and utilization of relevant patient clinical information for successful patients' care. Missing patient case folder is characterized by poor records filling and management practices adversely affect the quality and effective utilization of health information with negative consequences on healthcare delivery outcomes of every patient. The importance of comprehensive and accurate patients' records documentation through effective HIM practices cannot be overemphasized in health facilities, therefore, missing patient case folder might easily cause.

records deficiency. However, to foster quality and continuity of care. To ensure healthcare quality and safety, sufficient and reliable information should be available at the right time to support patient care and help make informed management decisions in the healthcare delivery. Hence, improving the quality of information through proper records management filling system (Osundina, 2014).

The primary purpose of keeping health records is for good quality of patient care and means of communication between the patient and any other doctor who will care for that patient. Health records also have an important role in teaching and research. Since remains a key useful for personal identification in cases of mass disasters, and assisting at the scene of crime, treatment claims by the victims. Missing patient case folder can lead to the treatment of patients without complete information which can cause a serious challenge to patient safety, increasing the likelihood of medical errors, adverse events, duplication of laboratory tests and procedures, and increased health care costs (Hughes, 2004; Dental Association, 2019).

Alegbeleye (2009), stressed out the points in time records become missing. Which are, when the notes are first pulled from file, when the clinic is ready and when the clinic is finished. This means that patients' records are at various points found to be missing. This can be discovered when the records are pulled for various appointment, when the clinic is ready and the patient is around and when the patient is around and when the patient is discharged or the clinic is over. Smith (2005) also stated the factors that leads to missing of records are organizational and management factors financial resources and constraints, policy standards and goals, safety culture and priorities of working environment design availability and maintenance of equipment in the shelve. According to Osundina (2008), regulation on confidentiality, decentralized medical systems, poor communication among professionals, the transfer of patient's care around different settings and the rapid turnover of patient's insurance plans were blamed for the poor management of patient's information.

Tshabalala-Msimang (2005), described missing patient records refers to as part of the whole of a patient record that cannot be traced and utilized for its legitimate

purpose as at when needed. Medical records department performance is measured on key performance indicators which include accurate tracking of case notes on dispatch and return to medical records departments. On-compliance by non-medical records department staff is reportable to relevant line managers. Case notes tracked to location (missing case notes) must be printed from 'tracker' for key performance indicator reporting. This will be carried out by all health records supervisors and reported to the general manager

In the existence of paper-based records, health record department must maintain control over all filing procedures and record usage. All records being removed from file, for any reason, should be signed for any reason, should be signed out and tracked as to its location. This process may be either manual or automated. This unit will first discuss some general policies and procedures relating to record control, and then the processes relating to both manual and automated chart tracking systems. Whichever system is used it is important that some system be in place to sign records out of the health record department in order to maintain record control.

1.1 Study Objectives

As highlighted earlier, patients such as the disabled, children, old age people, pregnant mothers, and the marginalized, have the right to access free healthcare services. However, the management of communication and patient records in our hospitals is becoming a serious issue of concern. Improper handling of patient records can have serious negative consequences. Therefore, the main objective of this study is to investigate the Consequences of Missing Case Folder in General Hospital Gusau, Zamfara State.

2.0 METHODOLOGY

The principle of survey research design was employed for this investigation. The target population of this study was limited to Health Information Managers of General Hospital Gusau, Zamfara State in North-West, Nigeria (Latitude and Longitude: 12.1722°N and 6.6613°E). The instrument for data collection in this study area was a check list tool. The checklist tool was verified and validated by the Health Information Management professionals at the Hospital in line with international approved mechanism.

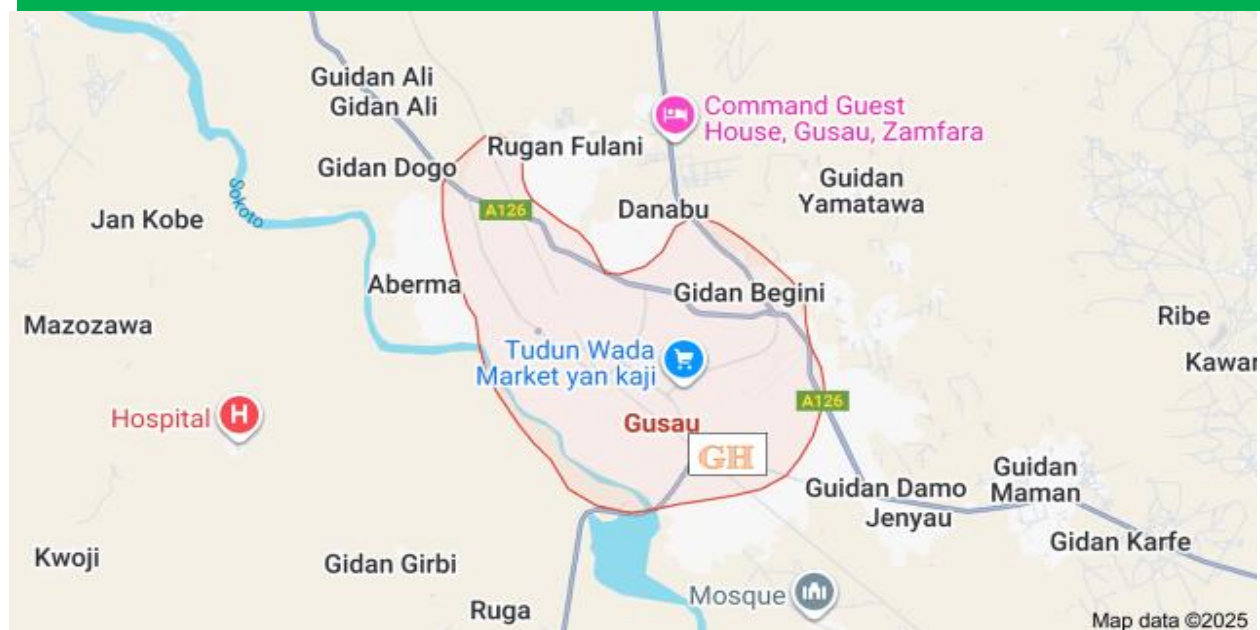


Figure 1. Illustrative google map of Gusau town showing the study location (i.e. General Hospital Gusau, marked GH).

3.0 RESULTS

The results obtained from the investigation are thus presented in Table 1. For consistency, the details were analyzed based on established standards as captured in section 3.1.

Table 1. Reliability Analysis of checklist tool Scales Measuring Challenges and Effect of Missing Case Folders at General Hospital, Gusau, Zamfara State.

Scale / Section	Number of Items	Cronbach's (α)	Alpha	Interpretation
Security Factors (Section B)	4	0.78		Good internal consistency
Filing Method Factors (Section B)	4	0.74		Good internal consistency
Human Factors (Section B)	4	0.81		Excellent internal consistency
Natural Disaster Factors (Section B)	4	0.69		Acceptable internal consistency
Challenges of Missing Case Folder (Section E)	4	0.76		Good internal consistency
Overall Scale (Section B + E)	20	0.83		Excellent internal consistency

3.1 Discussion

The reliability statistics show that Security Factors (comprising four items from Section B of the structured checklist) returned a Cronbach's Alpha of 0.78, which is interpreted as having good internal consistency. This suggests that the items measuring protection levels, maintenance, storage facilities, and space use to prevent missing case folders are consistently related and reliable for evaluating the security determinant.

The Filing Method Factors, also containing four items, yielded a Cronbach's Alpha of 0.74, which again indicates good internal consistency. The components of

this scale, such as the use of temporary folders, waiting time, filing equipment, and the atmosphere within the medical records library, reliably measure the respondents' perception of how filing procedures contribute to the issue of missing case folders (Wegner and Rhoda, 2013; Ohuabunwa *et al.*, 2016; Cwala *et al.*, 2024).

Furthermore, the Human Factor scale returned the highest reliability value among the individual determinants, with a Cronbach's Alpha of 0.81, denoting excellent internal consistency. The items within this section skill level, staff commitment, patient-staff relationships, and service delivery are closely related, indicating that respondents'



perceptions of human contributions to the problem are measured consistently and reliably.

The Natural Disaster Factors scale had a slightly lower reliability coefficient of 0.69, which is still within the acceptable range. This set of items assessed backup systems, space, shelves, and security measures in the context of natural events, and although less consistent than other determinants, it remains statistically acceptable for inclusion in the analysis (Ofori, 2025; Zegeye *et al.*, 2025).

In Section E of the structured checklist, which focused on the Challenges of Missing Case Folders, a reliability coefficient of 0.76 was observed. This reflects good internal consistency, indicating that items such as lack of space, unskilled manpower, poor filing methods, and inadequate security measures were reliably perceived as critical challenges by the respondents. When all 20 items across Sections B and E were combined into an overall Scale, the Cronbach's Alpha reached 0.83, representing excellent internal consistency. This high reliability affirms that the instrument is cohesively measuring the broader concept of missing case folders and their challenges in General Hospital Gusau. It gives confidence in the use of the collected data for further statistical analysis, such as descriptive statistics, correlation analysis, and inferential tests (e.g., chi-square, ANOVA), based on demographic variables from Section A.

In summary from the overall analysis indicate that, the outlines of mean scores and standard deviations of items categorized under four main effect and challenges are the determinants: Security, Filing Method, Human Factor, and Natural Disaster. These values reflect respondents' agreement levels on a Likert scale, with higher mean values indicating stronger agreement on the presence or adequacy of the specified item in the hospital setting.

Among the determinants, security ranked highest overall with a mean score of 2.98, suggesting it is perceived as the most significant and relatively better-managed determinant. Within the security category, the item "The level of protection used in the hospital" had the highest mean (3.27), indicating a fair level of confidence in protective measures. Human Factor came second with an average score of 2.88. The relationship between patients and healthcare providers was rated highest (mean = 2.95), implying that interpersonal dynamics are somewhat adequate but still require improvement. Natural Disaster issues had a lower overall rating (mean = 2.68), with the highest-rated item being "The level of space use in my hospital" (mean = 2.88), suggesting a need for

improvement in structural preparedness and contingency planning.

Furthermore, Filing Method had the lowest mean score overall (2.63), making it the most problematic determinant. The lowest-rated item was "The level of temporary folder use" (mean = 2.40), highlighting an over-reliance on temporary folders, which could contribute directly to folder misplacement. These findings suggest that inadequate filing systems and human-related factors are central challenges in managing patient case folders, even though security appears moderately addressed (Famurewa *et al.*, 2025; Sittmann *et al.*, 2025; Teddy, 2025).

4.0 CONCLUSION AND RECOMMENDATIONS

Work experience plays a critical role in shaping staff awareness and concern regarding operational inefficiencies and infrastructural gaps that may lead to missing patient case folders in General Hospital Gusau, Zamfara State. Inadequate filing systems and human-related factors are central challenges in managing patient case folders, even though security appears moderately addressed. Inadequate physical space for storing and organizing case folders is the most critical challenge faced by the hospital. Limited space can lead to overcrowded storage areas and increase the likelihood of misplacing or losing patient records.

There is need for management, government and partners to use advocacy for targeted interventions that leverage the experience of mid-level staff while providing necessary training for junior personnel as well as to enhance service delivery mechanisms of Health Information Management Personnel. Good filling method should be provided to minimise missing patient case folders at General Hospital Gusau, Zamfara State. Filling space should be provided to enhance the services and minimised missing patients' case folders.

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