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Nishimura (2000), Agindotan et al. (2003), (Kelebeni, 1983), (Usman and Smith, 2001), (Chege, 1998; Stein, 1987a,b; Tijani, 1993,1995), (Kumasi et al., 2001)

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Stoy N, Mackay GM, Forrest CM, Christofides J, Egerton M, Stone TW, Darlington LG (2005). Tryptophan metabolism and oxidative stress in patients with Huntington's disease. *N. J. Neurochem.* 93: 611-623.

Mussel RL, De Sa Silva E, Costa AM, Mandarim-De-Lacerda CA (2003). Mast cells in tissue response to dentistry materials: an adhesive resin, a calcium hydroxide and a glass ionomer cement. *J. Cell. Mol. Med.* 7:171-178.

Booth M, Bundy DA, Albonico P, Chwaya M, Alawi K (1998). Associations among multiple geohelminth infections in school children from Pemba Island. *Parasitol.* 116: 85-93.0.

Fransiscus RG, Long JC, (1991). Variation in human nasal height and breath, *Am. J. Phys. Anthropol.* 85(4):419-427.

Stanislawski L, Lefeuvre M, Bourd K, Soheili-Majd E, Goldberg M, Perianin A (2003). TEGDMA-induced toxicity in human fibroblasts is associated with early and drastic glutathione depletion with subsequent production of oxygen reactive species. *J. Biomed. Res.* 66:476-82.

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# Journal of Clinical Medicine and Research

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## Case Report

# Patients disclosure in health plan: Quality of care and physician competence

Adnan Amin Alsulaimani

Medical College, Taif University, Kingdom of Saudi Arabia. E-mail: [adnamn@gmail.com](mailto:adnamn@gmail.com).

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**Medical error and tort reform have increasingly taken center stage in the health care debate in our region and all over the world. Patients, policy makers and health care professionals grapple with the striking prevalence and consequences of medical error, may result in patient injury from the health care providers. Fears of malpractice liability, difficulties in communicating with patients and their families, inattention to their problems in details and giving inadequate time to them in listening and discussion, in addition to confusion about causation and responsibility, all have long impeded comprehensive and bold initiatives designed to change the patient, family and clinician experience with medical error. Offering an apology with complete patient respect and transparency with full disclosure of harmful medical errors to the patients and their families can do much to defuse the hurt and anger that can lead to further emotional and physical trauma. Health care professionals including doctors need to communicate with patients or their parties in their day to day activities. It should be an essential habit of doctors. In the present medical curriculum in medical education, emphasis was placed on learning communication skills by the undergraduate doctors.**

**Key words:** Kingdom of Saudi Arabia (KSA), discourse completion test (DCT), patients, health care.

## INTRODUCTION

The growth in malpractice premiums and claims payments over the Kingdom of Saudi Arabia and internationally has been reflected passively on healthcare provider and health service.

The data of the cases submitted to the Medico-legal committee of the Ministry of Health in Riyadh, Kingdom of Saudi Arabia from various parts of the country for the period 1420 through to 1423 H (1999 to 2003), were increasing dramatically. A total of 2223 cases had been referred to the various committees over the country past few years for consideration (Alsaddique 2004; Samarkandi, 2006).

A recent French study by (Ligi et al., 2008), reviewed iatrogenic events in admitted neonates. A total of 388 neonates were studied during 10,436 patient days. They recorded 267 iatrogenic events in 116 patients. The incidence of iatrogenic events was 25.6 per 1000 patient days. 92 (34%) were preventable and 78 (29%) were severe. Two iatrogenic events (1%) were fatal. This kind of medical malpractice raised the importance of medical

disclosure of harmful events in the early stages when it happened. British survey, focusing on disclosure of harmful medical error revealed, 92% of patients believed that a patient should always be told if a complication has occurred, and 81% of patients believed that a patient should not only be informed of a complication but also be given detailed information on possible adverse outcomes (Hingorani et al, 1999).

In 2001, the Joint Commission on Accreditation of Healthcare Organizations, now called the Joint Commission, issued the first nationwide disclosure standard in North America. This standard requires that patients be informed about all outcomes of care, including "unanticipated outcomes" (Oakbrook, 2007). Furthermore, several states in USA have passed legislation that would make physicians' apologies; including admissions of fault, inadmissible in malpractice suits, and this inadmissibility law often included all other health professionals (Taft, 2005). Medical disclosure efforts in the United States took more important steps

forward. In March 2006, the Full Disclosure Working Group of the Harvard Hospitals released a consensus statement emphasizing the importance of disclosing, taking responsibility, apologizing, and discussing the prevention of recurrences.

The purpose of this article is to focus on enhancing the uniformity and quality of clinician-patient communication, also drawing attention within organizations delivering healthcare, about the increasing demand of “doctors who listen” and offering an apology to the patients or his relative with full respect. We like to promote health care providers to be able to say, “I am sorry for what happened or was expected” with full responsibility without fear of the consequences, and to encourage physicians to disclose medical errors on the proper time and location to avoid any negative burden on the health care system.

### Communication Skills

In the aftermath of an incident, the primary objective of health care givers must be to support the patients and maintain the healing relationship. Patients and families are entitled to know the details of incidents and their implications. Communication should be open, timely, and sustained. Health providers must eliminate the adversarial relationship that a secretive, liability-focused approach to patient communication fosters (Laura, 2004). The caregiver’s role is to provide comfort and support and to consider the full extent of patient’s needs. However, not every conversation is necessarily effective, and there are many barriers that may place clear communication at risk. Some of these barriers include:

1. The anxiety and intimidation associated with the medical interaction between a highly trained medical professional and an unsophisticated patient
2. Patient stress associated with seeking health care services
3. Preconceived patient notions that make them less likely to listen to and understand important health care messages from their doctors
4. Cultural and linguistic differences between physicians and patients created by an increasingly diverse patient population
5. Physician time constraints that often result in brief patient interactions and cross-cultural misunderstandings (Laura, 2004).

Medical staff is committed to full disclosure of medical error, because it is the right thing to do. The patient and family have the right to know what happened also. In addition, honest communication promotes trust between the patient and health provider, so that the primary focus of the clinician-patient relationship remains the most important issue. Further, open discussion about errors can promote patient safety by encouraging clinicians to

seek systems improvements that minimize the likelihood of recurrence.

Medical faculty programs should stress on teaching and assessing medical communication skills, determining relevant knowledge and attitudes, and later evaluating educational outcome. Recognition of the need for faculty development grows in part from an abundant literature documenting the poor inter-rater reliability of faculty who assess communications (Lynch et al., 1992, Boulet, 1999, Naji et al., 1986).

To achieve uniformity of teaching and assessment in communications, first, there needs be a consensus about what is important. Consensus statements from Toronto and Kalamazoo provide such information (Makoul et al., 2003). The Toronto Consensus identified “the most important things that could be done now to improve clinical communications (Lynch et al., 1992, Boulet, 1999; Naji et al., 1986).

To achieve uniformity of teaching and assessment in communications, first, there needs be a consensus about what is important. Consensus statements from Toronto and Kalamazoo provide such information (Makoul et al., 2003). The Toronto Consensus identified “the most important things that could be done now to improve clinical communications.” These include physician-patient encounters in which patients get to identify all of their agenda items and concerns, eliciting patients’ perspective on illness and addressing feelings with empathy, information management (including appropriate use of open-ended questions and summaries), and the ability to negotiate to arrive at common ground. In addition faculty need to develop the ability to identify when these skills are performed, missing, or poorly performed. The faculty needs to acquire a set of instructional skills that are effective over a wide range of teaching situations, with widely varying communication performances and with learners who perform well and with those who perform poorly and finally we can reach to a consensus model of what we teach and how we teach it, from medical school to residency, from one discipline to another, from conceptual model to conceptual model, all begin to overlap, the field of communication will finally have come of age. (The Association of American Medical Colleges 1999) recommended the teaching and assessment of communication skills throughout medical school and residency programs.

### Patient respect

“Respect” is a word like “empathy”, “love”, and “compassion”, that everyone agrees connotes a positive attribute; however, there are innumerable ideas about what respect means. Perhaps the reason it is so difficult to define is because it can mean different things to different people, depending on whether it is being used as a verb or as a noun, on the person’s cultural background

and the context in which it is being discussed. Making patients feel respected, or valued as a person, is a multifaceted task that involves more than recognizing autonomy. Patients believed that respecting persons incorporates the following major elements: empathy, care and autonomy, provision of information, recognition of individuality, dignity and attention to needs (Dickert et al., 2009). Respecting patient dignity and identity is the corner stone of the active communication skill of health care providers. Proficiency in communicating with patients results in increased patient and physician satisfaction, increased adherence to therapy, and reduced risk of malpractice claims. Listening carefully and respectfully to the patient without interruption will go a long way toward better outcomes for the patient. Effective listening means concentrating on what the patient says and trying to understand their feelings as they speak. Giving bad news requires time, a setting free from distractions or interruptions, empathy, humility and active listening and to say that you may not have the answers to certain questions.

### Apologize

An apology is defined as “a speech act which is intended to provide support for the hearer who was actually or potentially affected by a violation” (Olshtain and Cohen 1983). The reactions of patients and their families to incidents are influenced both by the incident itself and the manner in which the incident is handled. Inadequate or insensitive management may cause further emotional trauma, while open acknowledgement of the injury, sensitivity, good communication, and skillful management of corrective actions may reduce emotional trauma. When there has been an error, one of the most powerful things a caregiver can do to heal the patients hurt is to apologize. Apologizing is an essential aspect of taking responsibility for an injury, even if, as is common, several systems failures are responsible for the error rather than one person. Explaining the event, communicating remorse, and making a gesture of reconciliation can do much to defuse the hurt and anger that follows.

### Apologies and culture

Speech acts have been found to share certain characteristics in different cultures. However, to say that they share common features does not mean they do not differ in other aspects (Abrahams et al., 1972).

In cross-cultural comparisons of apology strategies, both similarities and differences are reported throughout the literature (Sugimoto and Naomi 1997). They addressed that Japanese students exhibited more readiness to offer (and receive) apologies than their American counterparts. She further found that the secondary strategies of compensation and promise not to

repeat offense were mainly used by the Japanese group who were also reported to offer elaborate manifestations of the promise not to repeat offense and were more open to requests of forgiveness. American respondents, who did not offer clear reparation most probably to avoid weakening their position, declaring responsibility, or fulfilling future obligations, were also reported to attribute the offense to forgetfulness or circumstances beyond their control while Japanese respondents, who strived more to save face, stressed the lack of malicious intention yet admitted responsibility for the offense. Saving face is important in apology-warranting situations which justifies the definition of apology as a “politeness strategy that pays attention to the addressee’s negative face” (Cameron et al., 1989) and “any utterance which aims at remedying the effect of an offense or face-threatening act and restoring social harmony and equilibrium” (Holmes et al., 1993). The human nature tends to favor in-group over other -group may be attributed to their feeling to blame circumstances or another party for any wrongdoing or commend a member of the group for any good deed.

### Apologies in Arabic Culture

In Arabic, apologies are defined as the utterances and deeds a person attempts to offer to lift punishment or blame due him/her for a malicious deed he/she has committed (Al-Abdi et al., 1981). This definition may appear too simplistic by Western standards, which may be attributed not only to the fact that the reference is quite old (and probably one of the first on the subject) but also to the emergence of quite elaborate definitions for apology in recent literature. Using verses from the holy Quran and proverbs to mitigate the victim’s anger was also reported by El-Khalil et al., (1989), who attributed it to the impact “of the Islamic teachings and popular folklore” on speech acts.

Bataineh and Bataineh (2008) investigated the differences in the realization patterns of apology among native speakers of American English and Jordanian Arabic. Differences in the use of apology strategies were found between the two sample groups as well as the male and female respondents of each group. Differences involve using several manifestations of explicit apology among other less explicit apology strategies. The authors further examined the differences between male and female respondents in both groups and found that there were more differences between Jordanian male and female respondents than between American male and female respondents, which may be attributed to the fact that there is a greater similarity between how boys and girls are raised in the U.S. than between how they are raised in Jordan.

Another study from Sudan by (Nureddeen, 2008) she outlined the type and extent of use of apology strategies

in Sudanese Arabic and on the socio-cultural attitudes and values of Sudanese community. She examined 1082 responses to a Discourse Completion Test (DCT) that consisted of 10 different social situations of varying severity of offense, strength of social relationship and power between hypothetical speakers and hearers. The informants were 110 college educated adults in Sudan. The survey was written in Sudanese dialect to elicit responses that approximate verbal apologies that might be given in these situations. However, the selection of apology strategies in this study reinforces the culture-specific aspect of language use, despite the fact that a more restricted classification of apology strategies was used as a model for analyzing the data, the results confirm the great significance for understanding differences in language use and successful intercultural communication in Sudanese community.

### **Resistance to apologize**

It is no accident that physicians often resist acknowledging offenses in the medical setting or fail to adequately apologize for them. An obvious and understandable reason for such resistance is the fear of consequences, such as an angry patient, a complaint sent to the court. Initial evidence now suggests that admissions of harm and apologies strengthen, rather than jeopardize relationships and diminish punitive responses (Leape, 2005).

Another important explanation for such resistance is the need for physicians to maintain a self-image for themselves and others of being strong, always in charge, unemotional, and a perfectionist. The feared loss of this self-image may lead to the unbearable emotion of shame and subsequent feelings of depression. An apology may expose vulnerability, remove emotional armor, and allow emotions to be exposed. Medical professionals and colleagues need to work at tolerating and supporting their own humanity and that of their colleagues. They need to regard apologies as evidence of "honesty, generosity, humility, commitment, and courage" (Lazare, 2004).

### **Responsibility**

The overall responsibility and accountability for an adverse event rests with the hospital. Thus, following a serious event it is incumbent upon the organization and its leaders to also accept responsibility and communicate that responsibility and remorse to the patient and family. Because every event is unique, organizational leaders and clinicians should coordinate communications with them. On first consideration, it may seem odd that in situations where the physician had nothing to do with an adverse event, she/he should take responsibility for it. In this circumstance, taking responsibility does not mean assuming sole culpability for the adverse event. A host of

factors likely contributed to the adverse event many of them beyond any one person's control. Medical malpractice insurance offer a marginal value of security to health care givers and to the organization they belong to. Suitable medical malpractice insurance should be implemented to all medical staff personally or through their hospital leaders.

### **Explain what will be done to prevent future event**

The patient must have confidence that the physician or facility is committed to correcting faulty procedures and avoiding similar offences in the future. Once the hospital investigation is completed and corrective changes are planned, it is important to inform the patient and family of these plans and explain what is expected or unexpected outcome. Injured patients have a strong interest in seeing to it that what happened to them does not happen to someone else. The patient must have confidence that the physician or facility is committed to correcting faulty procedures and avoiding similar offenses (Lazare, 2006). Caregivers need to explain unexpected complications in simple patient language without any complicated medical terminologies. They often underestimate the importance of this aspect of the response to an event. Knowing that changes were made and that some good came of their experience helps the patient and family cope with their pain or loss.

### **Conclusions**

Effective communication channels and proper way of apology from caregivers and patients or their relatives may restore damaged relationships or even strengthen previously satisfactory and bidirectional respectful clear relationships. Offering an apology and making disclosure of harmful errors to patients may diminish guilt, shame, and the fear of retaliation and to restore the public's trust in the honesty and integrity of the healthcare system and quality of patients care. Medical staff is committed to full disclosure of medical error, because it is the right thing to do. The patient and family have the right to know what happened. By facilitating and encouraging full disclosure, managers help initiate healing process for all involved and can better ensure regulatory of proper compliance. Medical professionals and faculty staff should emphasize the importance of teaching medical students the value of proper communication skills as part of their curriculum in the under graduate programme.

### **REFERENCE**

- Al-Abdi, Mohammed O, Kitaabu-I-3afwi wali3tithaar (1981). "A Book on Pardon and Apology". Imam Mohammed Bin Saud Islamic University Press, Riyadh, pp. 13-15.
- Alsaddique A (2004). Medical liability. The dilemma of litigations Saudi

- Med. J., 25(7): 901-906.
- Association of American Medical Colleges (1999). *Contemporary issues in medicine: communication in medicine*, Washington, DC: Association of American Medical Colleges.
- Bataineh RF, Bataineh RF (2008). A cross-cultural comparison of apologies by native speakers of American English and Jordanian Arabic. *J. Pragmat.*, 40: 792-821.
- Boulet JR, Ben David MF, Ziv A, Burdick WP, Curtis M, Peitzman S (1998). Using standardized patients to assess the interpersonal skills of physicians (1983). *Acad Med.*, 73(10 Suppl): S94-S99
- Cameron D, Coates J (1989). Lakoff in context: the social and linguistic functions of the tag questions. In: Coates, Jennifer, Cameron, Deborah (Eds.), *Women in their Speech Communications* (1989). Longman, London, pp. 74-93.
- Dickert NW, Kass NE (2009). Understanding respect: Learning from patients. *J. Med. Ethics*, 35(7): 419-423.
- El-Khalil, Hasan MH (1998). Variation in Apology Strategies among Friends and Acquaintances in Jordanian Arabic. Unpublished Master's Thesis. Yarmouk University, Irbid, Jordan
- Hingorani M, Wong T, Vafidis G (1999). Patients' and doctors' attitudes to amount of information given after unintended injury during treatment: cross sectional, questionnaire survey. *BMJ*, 318(7184): 640-641.
- Holmes J (1993). New Zealand women are good to talk to: Analysis of politeness strategies in interaction. *J. Pragmat.*, 20: 91-116.
- Laura JM (2004). MPH, CAE, of the California Academy of Family Physicians. *Medical jargon and clear communication*, pp. 8-9.
- Lazare A (2006). MD Apology in Medical Practice. *An Emerging Clinical Skill JAMA*, 296: 1401-1404.
- Lazare A (2004). *On Apology* New York, NY: Oxford University Press, pp. 65-66.
- Leape LL (2005). Understanding the power of apology: how saying "I'm sorry" helps heal patients and caregivers. *Focus on Patient Safety A Newsletter from the National Patient Safety Foundation*, 8: 1-3.
- Ligi I, Arnaud F, Jouve E, Tardieu S, Sambuc U (2008). Iatrogenic events in admitted neonates: a prospective cohort study. *Lancet*, 371(9610): 404-10.
- Lynch DJ, Tamburrino MB, Nagel R (1992). Teaching interviewing skills: the effect of instructors' academic department. *Med. Teach.*, 14(1): 59-63.
- Makoul G (2001). Essential elements of communication in medical encounters: the Kalamazoo consensus statement *Acad. Med.*, 76(4): 390-393.
- Massachusetts Coalition for the Prevention of Medical Errors Web site: Massachusetts Coalition for the Prevention of Medical Errors. *When Things Go Wrong* (2006). Responding to Adverse Events. Available @ <http://www.macoalition.org/publications.shtml> [ContextLink].
- Naji SA, Maguire GP, Fairbairn SA, Goldberg DP, Faragher EB (1986). Training clinical teachers in psychiatry to teach interviewing skills to medical students. *Med. Educ.*, 20(2): 140-147.
- Nureddeen FA (2008). Cross cultural pragmatics: Apology strategies in Sudanese Arabic. *J. Pragmat.*, 40: 279-306.
- Oakbrook T (2007). The Joint Commission. Hospital accreditation standards IL: Joint Commission Resources.
- Olshtain E, Cohen AD (1983). Apology: A speech act set In N. Wolfson and E. Judd (Eds.) *Sociolinguistics and Language Acquisition*. Rowley, (MA: Newbury House, pp. 18-35.
- Samarkandi A (2006). Status of medical liability claims in Saudi Arabia. *Ann. Saudi Med.*, 26: 87-91
- Sugimoto, Naomi (1997). A Japan-U.S. comparison of apology styles *August Commun. Res.*, 24(4): 349-369.
- Taft L (2005). Apology and medical mistakes: opportunity or foil? *Ann. Health Law*, 14: 55-94.
- Abrahams, Roger D, Troike, Rudolph C (1972). *Language and Cultural Diversity in American Education*. Prentice Hall, Englewood Cliffs, New Jersey, pp. 101-104.

*Full Length Research Paper*

# Management of snake bite in resource-challenged setting: A review of 18 months experience in a Nigerian hospital

Joseph O. Fadare<sup>1,\*</sup> and Afolabi OA<sup>2</sup>

<sup>1</sup>Department of Internal Medicine, Kogi State Specialist Hospital, Lokoja, Nigeria.

<sup>2</sup>Department of Surgery, Kogi State Specialist Hospital, Lokoja, Nigeria.

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Snake bite is a worldwide environmental and occupational hazard with significant public health importance. The management of snake bites includes the use of specific anti-venom, use of clotting factors and tetanus prophylaxis. In many developing countries however, specific anti-venoms are not widely available and this might affect the outcome of patient management. The main objective of this work is to analyze the clinical presentation, management and outcome of snake bite patients a resource-challenged environment like ours. The study is a cross-sectional retrospective review of medical records of all patients admitted with snake bite to the male and female medical wards of the Specialist Hospital, Lokoja, Nigeria from 1<sup>st</sup> January, 2009 till the end of June 2010. Information retrieved for the purpose of this study include patients' bio data, affected part of the body, summary of presenting complaints, mode and outcome of management. A sum total of six hundred and sixty-six patients were admitted to the medical wards of the hospital during the period in question out of which fifteen cases (2.25%) of snake bite were recorded. Eleven patients (73.3%) were male and the mean age was  $34.3 \pm 1.9$  years. The most common presenting feature was local swelling (100%), followed by bleeding from the site of envenomation (50%) while four (33%) patients had haematuria. Snake antivenom was administered in eleven patients (91.7%) while five patients had whole blood transfused. No mortality was recorded among the patients admitted with snake bite. The management of snake bite in Nigeria is hampered by unavailability of specific antivenom and other supportive measures like clotting factors and cryoprecipitate. There is a need to make effective and safe antivenoms available and affordable to improve patients' outcome. This work has shown however that it is possible to have good outcomes despite the many challenges encountered by health care personnel.

**Key words:** Snake bite, management, antivenom, resource-challenged environment.

## INTRODUCTION

Snake bite is a worldwide environmental and occupational hazard with significant morbidity and mortality which has been found to occur more among farmers, plantation workers and other people who dwell outdoors especially in rural and poor communities (Alirol et al., 2010; Ahmed et al., 2008; Habib et al., 2008; Pugh and Theakston, 1980). In Nigeria, it commonly affects the

rural population of the savannah region of the country where farming and animal husbandry are the major occupation. The incidence of snake bite worldwide cannot be accurately estimated and the reasons for this include: lack of immediate access to healthcare, influence of traditional beliefs and practices and poverty. In the Nigerian savannah, the incidence of snake bites has been reported to be in the range of 48 to 497 per 100,000 populations per year (Pugh and Theakston, 1980) which indeed can only be an estimate because of the earlier cited reasons. Four main families of snakes (Viperidae,

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\*Corresponding author. E-mail: jofadare@gmail.com.

Elapidae, Colubridae and Actraspididae) have been identified to be responsible for this problem in Nigeria with three species from the first two families - carpet viper (*Echis ocellatus*), black-necked spitting cobra (*Naja nigricollis*) and puff adder (*Bitis arietans*) being the most common culprits for envenomation in Nigeria (Habib et al., 2001). *E. ocellatus* has been reported to be responsible for the majority of envenomation in the savannah region of Nigeria.

The clinical manifestations of snake bites depend mainly on the specie responsible for envenomation and could affect the central nervous system, kidneys, blood coagulability and the cardiovascular system (Reid and Theakston, 1986). There are also local effects at the site surrounding the point of envenomation. In Nigeria, the main specie responsible for envenomation, *E. ocellatus* has been found to contain a prothrombin activating procoagulant, haemorrhagin which causes bleeding, incoagulable blood, shock and local reactions/ necrosis (Habib et al., 2001). The management of snake bites includes the use of snake anti-venom, use of clotting factors, tetanus prophylaxis and sometimes administration of antibiotics (White, 2005; Tagwireyi et al., 2001). Specific anti-snake venom is usually preferred as it offers better neutralizing properties as compared to non-specific ones. However in many developing countries, use of specific anti-snake venoms is limited because of non-availability, promotion of non-specific anti-venoms and high cost of specific anti-venoms where available (Warrell, 2008; Chippaux and Kambewasso, 2002). This problem of non-availability of specific anti-venom has contributed in no small measure to increasing mortality and morbidity from snake bites in the tropics. In Nigeria, there are three types of anti-snake venom that are sometimes available for purchase: polyvalent non-specific anti-venom produced in India, the Pasteur anti-snake venom and the EchiTab anti-venom which was developed recently specifically for snake bites from the carpet viper, *E. ocellatus* (Habib et al., 2001). From our experience, the most common anti-venom found in the Nigerian market is the polyvalent non-specific type produced in Asia followed by the Pasteur anti-venom. The newly developed EchiTab anti-venom is not yet widely available as it is still undergoing the stringent process of registration (Laing et al., 2003).

The main objective of this work is to analyze the clinical presentation, management and outcome of snake bite patients a resource-challenged environment like ours.

## MATERIALS AND METHODS

### Setting

This study was carried out at the Kogi State Specialist Hospital, a

tertiary health care facility in Lokoja, North-Central Nigeria. This center is an 80-bed institution with clinical specialists in the area of Internal Medicine, Surgery, Paediatrics, Family Medicine and Gynaecology/Obstetrics that caters for the health care needs of about 3 million people residing in Kogi and other neighboring states of the North-Central region of Nigeria.

### Procedure

The study is a cross-sectional retrospective review of medical records (admissions and discharge registers, case notes and death certificates) of all patients admitted to the male and female medical wards of the hospital from January, 2009 till the end of June, 2010. The records of all patients presenting with snake bite were extracted and analyzed. Information retrieved for the purpose of this study include: the age and gender of the patients, month of envenomation, affected part of the body, summary of presenting complaints and mode of management. All the above mentioned variables in addition to the outcome of patient's management were entered and analyzed using Microsoft Excel. The results were expressed as means and frequencies.

## RESULTS

A sum total of six hundred and sixty-six patients were admitted to the medical wards of the hospital during the period in question out of which fifteen cases of snake bite were recorded. This represents only 2.25% of the total admission on the medical wards during the study period. However we were able to retrieve the full medical records of only twelve (12) patients for full analysis and review. Majority of the patients (11 to 73.3%) were male while only four (26.7%) were of the female gender. The mean age of the patient was 34.3 years ( $\pm 1.9$ ). In all cases, the snake bite affected the lower limbs with the left foot being affected in seven cases and the right in five. Five of the affected patients were bitten during the months of the rainy season (May to October) while the remaining seven patients had their episodes during the months of the dry season (November to April). Majority of the patients (75%) were attacked during the evening or at night. No mortality was recorded among the fifteen patients seen during the study period.

The most common presenting feature was local swelling which was present in all the cases, followed by bleeding from the site of envenomation (50% of cases) while four (33%) patients had haematuria. Other less frequent clinical features include bleeding from the gums, bleeding from venepuncture sites, conjunctival haemorrhage, acute renal failure and sublingual haematoma (Table 1). Ten (83.3%) patients had deranged crude bedside clotting time on presentation.

In managing these patients, administration of anti-snake venom was carried out in eleven patients (91.7%), while five patients had fresh whole blood transfused. Three types of anti-venom were used in the treatment of

**Table 1.** Presenting features among snake bite patients.

Presenting features	Frequency	Percentage
Local swelling	12	100
Bleeding from bite site	6	50
Haematuria	4	33.3
Acute renal failure	1	8.3
Bleeding from gum	1	8.3
Conjunctival haemorrhage	1	8.3
Sublingual haemorrhage	1	8.3
Bleeding from venepuncture site	1	8.3

these patients: the Institute Pasteur Serum (Ipser) African antivenom (polyvalent equine F(ab')<sub>2</sub> antivenom, *Bitis arietans*, *B. gabonica*, *Echis leucogaster*, *Naja melanoleuca*, *N.haje*, *N.nigricollis*, *Dendroaspis viridis*, *D.jamesoni*, *D.augusticeps*), the MicroPharm "EchiTab G" antivenom (monospecific, *E. ocellatus*, caprylic acid purified whole IgG antivenom and the polyvalent snake antivenom Asia (*Bungarus caeruleus*, *Daboia russelii*, *Echis carinatus*, *Naja naja*). The Pasteur anti-venom was administered in ten patients (83.3%) while only one patient had the EchiTab anti-venom. One patient had 5 vials (50 ml) of the polyvalent non-specific anti-snake venom from India with no effect necessitating a change to the Pasteur type. The average number of vials administered was 2 (Range 1 to 5 vials). Five of the patients had blood transfused with a mean volume of 2.8 pints of blood (Range 1 to 4 pints). Two patients reacted to the anti-venom (one to the non-specific polyvalent and another to the Pasteur anti-venom) necessitating the use of parenteral anti-histamines and hydrocortisone. About half of the patients had antibiotics administered during the period of their hospital stay.

## DISCUSSION

It was interesting to note the relatively small number of patients with snake bite in our study despite the fact that the study site is located in the savannah region of North-Central Nigeria. Habib et al. have earlier reported the fact that less than 10% of snake bite victims present at any health care facility and many of them actually patronize traditional health practitioners. Another factor is the fact that the study site is actually located in the transitional section tropical between the tropical and savannah regions of Nigeria hence the incidence of snake bite may not be as high as those from the northern parts of the savannah. The preponderance of male patients among our series can only be explained by the professional responsibilities of men in a predominant agrarian

community and this result is in keeping with that from similar studies from other regions (Chippaux and Kambewasso, 2002; Sharma et al., 2005). The mean age recorded in this study, (34.3 ± 1.9 years) also supports the notion that snake bite is more common among the young and active members of the population. Having a patient aged 74 years among our cases should also not be surprising as elderly people still work on the farms in these communities. The finding that only the lower limbs were affected and most bites occur at night might be due to the fact that the reptiles were disturbed or stepped upon because of poor lighting of the environment and the fact that most people go about barefooted or with minimally protective footwear. In contrast, the involvement of the upper limbs has been reported in studies in Zimbabwe and occupational factors may play a role here (Muguti et al., 1994).

Regarding the clinical features, local swelling and features of coagulopathy were the most commonly recorded among the patients. Clinically, the coagulopathy disorder was diagnosed using the crude bedside whole blood clotting time (WBCT20) which has been found to strongly suggest carpet viper envenomation in the Nigerian savannah (Meyer et al., 1997). In the WBCT20 test, several millilitres of blood collected from the patient are left to stand for 20 min in a clean, dry test tube. The tube is then tilted at intervals to see if the blood has coagulated.

Identification of the snake responsible for the bite/envenomation in most cases will clarify whether the snake is poisonous or not and this will determine the next line of action. Though the snake was killed in some of the cases reviewed during this study, none was brought to the hospital for identification of specie mainly because the patients were not aware of the need to do this. Due to resource challenges, the use of other coagulation tests like PT/PTTK and fibrinogen were not carried out in these patients either for the diagnosis of coagulopathy or for the monitoring of the recovery process.

In managing our patients, the Institute Pasteur Serum



(Ipser) African antivenom was the most commonly administered with the primary outcome of resolution of coagulopathy achieved. Only one patient had anaphylaxis reaction during its administration and the reaction was managed with parenteral anti-histamines and corticosteroids. This observation is strongly in support of findings from a previous study which concludes that there are no benefits using routine premedication (steroids or anti-histamines) before administration of anti-venom (Yong Soh and Rutherford, 2006). Only one patient had the EchiTAB anti-venom administered and the relatives had to travel about 350 kilometers to purchase it. This fact underlines the problem of availability of potent antivenom in Nigeria. It would be difficult to determine the comparative efficacy of the Institute Pasteur Serum (Ipser) antivenom and the EchiTAB antivenom among our patients because of the small number but a comparative study carried out previously in northern Nigeria had shown that both are equally effective with the EchiTAB antivenom needing a smaller dose than Ipser antivenom to achieve the same outcome ((Meyer et al., 1997). The imported non-specific anti-venom from Asia was only administered in one patient who after 50 ml (5 vials) without any clinical improvement had to be converted to the Institute Pasteur Serum (Ipser) African antivenom with which a significant clinical improvement and good outcome achieved. The problem of production of antivenom for snake bites in developing sub-Saharan African countries has been receiving some positive attention in the recent years. In addition to laboratories traditionally producing antivenoms for Africa, such as EgyVac (Egypt), Sanofi-Pasteur (France) and South African Vaccine Producers (South Africa), some other manufacturers, such as MicroPharm Ltd. (UK), Instituto Bioclon (Mexico), and Instituto Clodomiro Picado (Costa Rica), have produced antivenoms against relevant African snake venoms.(Ramos-Cerrillo et al., 2008; Segura et al., 2010).

In one patient out of our cohort with haemorrhage from puncture sites and mucosal surfaces who was unable to get any anti-venom, the bleeding episodes was managed with multiple transfusions of fresh whole blood. Blood transfusion during the management of snake bite serves two purposes: first it provides some clotting factors that can help in correcting some of the haemorrhagic tendencies and also it corrects the anaemia due to continuing blood loss in these patients. Transfusion of clotting factors (fresh frozen plasma or cryoprecipitate) was not possible in any of these patients because of non-availability of the infrastructure to preserve these biological in our setting. However, the managing team insisted on transfusion of fresh whole blood in all cases so that the required factors are still useful for the patient.

No mortality was recorded among patients with snake bite treated in our health care facility during the study duration. Data from Kaltungo, a town in the Nigerian savannah where snake bite is very common revealed a mortality rate of 1.4% among snake bite patients during the year 2007 (Habib et al., 2008). This relatively low rate of mortality among hospitalized patients shows a high level of competence among the medical personnel in these healthcare facilities despite all the material and logistics inadequacies.

## Conclusion

Snake bite continues to be a major cause of morbidity and mortality worldwide and Nigeria is no exception. Its management in Nigeria is hampered by unavailability of specific antivenom and other supportive measures like clotting factors and cryoprecipitate. There is a need to make effective and safe antivenoms available and affordable to improve patients' outcome.

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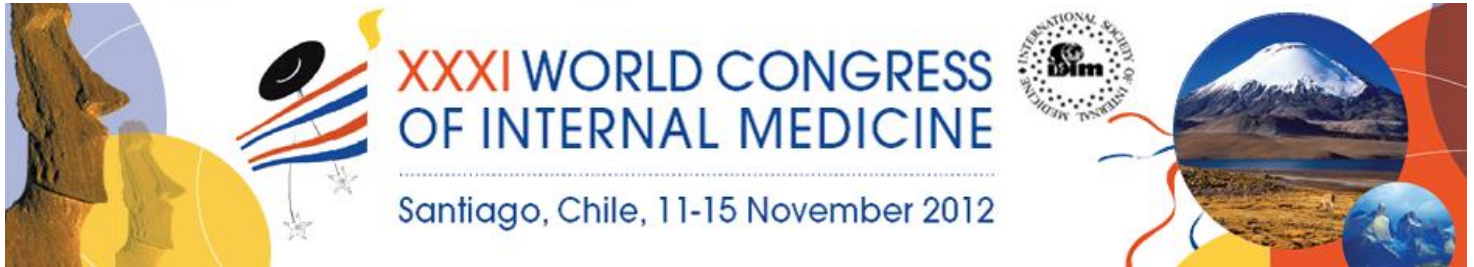
## REFERENCES

- Ahmed SM, Ahmed M, Nadeem A, Mahajan J, Choudhary A, Pal J (2008) Emergency treatment of a snake bite: Pearls from literature. *J. Emerg. Trauma Shock*, 1: 97-105
- Alirol E, Sharma SK, Bawaskar HS, Kuch U, Chappuis F (2010) Snake bite in South Asia: a review. *PLoS. Negl. Trop. Dis.*, 26; 4: e603.
- Chippaux JP, Kambewasso A (2002). Snake bites and antivenom availability in the urban community of Niamey, Niger. *Bull. Soc. Pathol. Exot.*, 95: 181-183.
- Habib AG, Abubakar SB, Abubakar IS, Larnyang S, Durfa N, Nasidi A, Yusuf PO, Garnvwa J, Theakston RD, Salako L, Warrell DA; EchiTab Study Group (Nigeria & UK) (2008). Envenoming after carpet viper (*Echis ocellatus*) bite during pregnancy: timely use of effective antivenom improves maternal and foetal outcomes. *Trop. Med. Int. Health*, 13: 1172-1175.
- Habib AG, Gebi UI, Onyemelukwe GC (2001). Snake bite in Nigeria. *Afr. J. Med. Sci.*, 30: 171-178.
- Laing GD, Renjifo JM, Ruiz F, Harrison RA, Nasidi A, Gutierrez JM, Rowley PD, Warrell DA, Theakston RD (2003). A New Pan African polyspecific antivenom developed in response to the antivenom crisis in Africa. *Toxicon*, 42: 35-41.
- Meyer WP, Habib AG, Onayade AA, Yakubu A, Smith DC, Nasidi A, Daudu IJ, Warrell DA, Theakston RD (1997). First clinical experiences with anew ovine Fab Echis ocellatus snake bite antivenom in Nigeria: randomized comparative trial with Institute Pasteur Serum (Ipser) African antivenom. *Am. J. Trop. Med. Hyg.*, 56: 291-300.
- Muguti GI, Maramba A, Washaya CT (1994). Snake bites in Zimbabwe: a clinical study with emphasis on the need for antivenom. *Cent. Afr. J. Med.*, 40: 83-88.

- Pugh RN, Theakston RD (1980). Incidence and mortality on snake bite in savanna Nigeria. *Lancet*, 2(8205): 1181-1183.
- Ramos-Cerrillo B, de Roodt AR, Chippaux JP, Olguin L, Casasola A, Guzman G, Paniaqua-Solis J, Alagon A, Stock RP (2008). Characterization of a new polyvalent antivenom (Antivipmyn® Africa) against African vipers and elapids. *Toxicon*, 52, 881-888.
- Reid HA, Theakston RD (1986). The management of snake bite. *Bull. World Health Organ.*, 61: 885-895.
- Segura A, Villalta M, Herrera M, Leon G, Harrison R, Durfa N, Nasidi A, Calvete JJ, Theakston RD, Warrell DA, Gutierrez JM (2010). Preclinical assessment of the efficacy of a new antivenom (EchiTab-Plus-ICP®) for the treatment of viper envenoming in sub-Saharan Africa. *Toxicon*, 55: 369-374.
- Sharma N, Chauhan S, Faruqi S, Bhat P, Varma S (2005). Snake envenomation in a north Indian hospital. *Emerg. Med. J.*, 22: 118-120.
- Tagwireyi DD, Ball DE, Nhachi CF (2001). Routine prophylactic antibiotic use in the management of snakebite. *BMC. Clin. Pharmacol.*, 1: 4.
- Warrell DA, Unscrupulous marketing of snake bite antivenoms in Africa and Papua New Guinea: choosing the right product--'what's in a name?'(2008). *Trans. R. Soc. Trop. Med. Hyg.*, 102: 397-399
- White J (2005). Snake venoms and coagulopathy *Toxicon*, 45: 951-967.
- Yong SS, Rutherford G (2006). Evidence behind the WHO guidelines: Hospital Care for Children: Should s/c Adrenaline, Hydrocortisone or Antihistamines be used as premedication for snake antivenom. *J. Trop. Paed.*, 52: 155-157.

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