Chtoura Hospital LOGO

Impact Of Weekly Patient-safety Audits On Adherence To Patient Safety Guidelines at Chtoura Hospital

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Introduction

In Lebanon, "Patient Safety" is a fairly young concept that has recently been adapted by Lebanese Hospitals during the last national accreditation. Chtoura Hospital is a 75 bed general hospital, located in Chtoura- Bekaa, that was reopened in 2011 under a new administration. Its "Patient Safety" program was reestablished towards the end of 2012. In an attempt to spread the patient safety culture extensive training was conducted about this topic in the hospital.

Purpose

To gauge the spread of the patient safety culture, it was decided to conduct extensive auditing on the floors (on site). This on site auditing will provide several advantages:

1- Provide an immediate mean for corrective actions, thus continuously reminding staff members of the basis that they have been taught during their in-service education, until the safe practices are embedded in their everyday processes

2- Provide a mean for control, so that staff realize that this concept needs to be implemented rather than just memorized for occasional inspections

3- Provide a mean to assess the number of actual errors that occur in the wards and compare it to the number of reported errors, thus providing a reliable KPI that will help us in assessing the spread of the safety culture in the hospital and fulfill the accreditation requirement for this KPI.

Methodology

The patient safety officer (PSO) was assigned the task of performing at least 2 audits per week on every patient ward over a period of 2 months (July-August 2013). During these audits an audit sheet had to be filled that included the following processes:

- Patient Identification
- Fall Prevention
- Verbal Orders
- Medication administration and Intravenous infusions
- "Safe Surgery" checklist

Procedure

The PSO was instructed to perform rounds on patients' wards at this stage and observe the above mentioned processes using the guidelines detailed in the adjacent audit sheet. During every round, each process had to be observed 5 times (on 5 different patients) to detect the occurrence of any errors. Each ward was audited at least twice per week.

A baseline audit was conducted during the last week of June (audit 0) then each ward was audited 12 times during July and August. During the audits the PSO was pointing out the errors and explaining the rationale for the correct methodology of the process whenever needed. Also, staff members were reminded to report all the errors that occurred during their shifts on the provided "accident report" form. The errors noted during each audit were documented on the audit sheet and entered on a spread sheet for accumulation of results.

Audit Sheet of "Patient Safety" Wards' Rounds

Patient Identification observation:	C	NC	NA	Comments
Correct bracelet				
Identification performed at required instance				
Correct mode of identification				
Correct method of labeling during sample collection				
Fall prevention observation:	**C**	**NC**	**NA**	**Comments**
Fall risk assessment documented				
Patient side rails elevated				
Call bell within reach				
Bed placed at lowest level				
No environmental obstacles in room				
Verbal order observation:	**C**	**NC**	**NA**	**Comments**
2 nurses take the verbal order				
Nurse uses SBAR method to communicate with physician				
Verbal order stamp used				
Verbal order dated and signed accurately by nurse				
Doctor signs order within 24 hours				
Meds administration observation :	**C**	**NC**	**NA**	**Comments**
Patient medication labeled appropriately				
Documentation on Medication Sheet is written correctly				
2nurses prepare and sign hi risk meds				
Meds administered according to 5 Rs (right med, patient, dose, time, route)				
Error in med administration reported				
IV observation:	**C**	**NC**	**NA**	**Comments**
IV labeled correctly				
Fluid dosage is administered as ordered				
Additives noted correctly with appropriately colored labels				
No evidence of phlebitis				
OR observation:	**C**	**NC**	**NA**	**Comments**
Consent signed by patient and doctor				
Site is marked by surgeon (if needed)				
All pre-op tests and consultations performed prior to transfer to OR				

Results

At the baseline audit (0), the total number of errors noted on the wards was 194 errors. This number showed a gradual and steady decline during the subsequent audits during July and early August. However there was a spike of errors during audits 9 and 10 then the total of errors went down during the last 2 audits at end of August. The highest number of errors was noted in the pediatrics floor followed by the ICU then the maternity floor. The types of error were highest in the procedure of verbal orders followed by medication administration and patient identification.

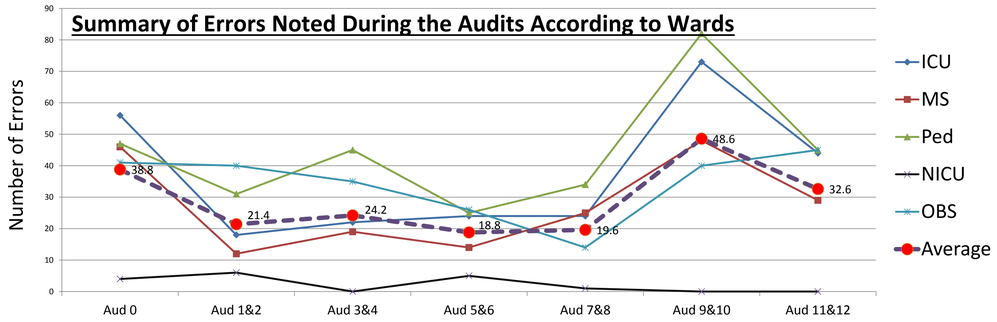
The rate of error reporting was near zero (1 per week) at the beginning of this intensive audit. Unfortunately, the rate of error reporting did not change throughout the 2 months of this audit, thus we were unable to calculate a variation in the rate of reported to actual errors.

Number of errors During the Audits According to Wards and Types

Ward	Aud 0	Aud 1&2	Aud 3&4	Aud 5&6	Aud 7&8	Aud 9&10	Aud 11&12	Total
ICU	56	18	22	24	24	73	44	261
MS	46	12	19	14	25	48	29	193
Ped	47	31	45	25	34	82	45	309
NICU	4	6	0	5	1	0	0	16
OBS	41	40	35	26	14	40	45	241
Average	38.8	21.4	24.2	18.8	19.6	48.6	32.6	
Total	194	107	121	94	98	243	163	

Identification	21	48	21	32	32	64	32	250
Fall Prevention	29	4	5	3	7	19	6	73
Verbal Orders	70	37	38	25	48	60	53	331
Medication admin	36	8	42	15	0	95	64	260
IV observation	24	10	14	17	7	2	1	75
OR Preparation	15	0	1	2	4	3	7	32

Summary of Errors Noted During the Audits According to Wards



Discussion

As noted, verbal orders is the most problematic area that we encountered, this is mostly due to the fact that as a relatively small community hospital we need the cooperation of doctors to minimize the frequency of phone orders and the adherence of the nursing staff to the proposed procedure (2 nurses to take the order), which is hard to do when the number of verbal orders is very high. The second problematic area of patient identification is mostly encountered in the pediatric floor where the bracelets are frequently removed and identification is not carried out according to procedure. We have been following up on this frequent error and hope for an improvement. As for medication administration the main issue is in the labeling and reporting of mediation errors.

As noted the audit succeeded in improving the adherence to the proposed guidelines. Unfortunately, the sudden increase in the number of errors noted during audits 9 and 10 was attributed to the sudden rise in the number of admissions and turnover rate of patients during mid August, which followed the month of Ramadan and the Eid when the patient census was at its lowest of the year. With the rise in patient census ,the nursing staff was more likely to commit errors (as it is well known) and to forgo the usual precautionary measures. The lack of reporting is a major issue, and we hope that it will improve once we share these results with all the staff members.

Our hospital is still at the early stages of acknowledging the patient safety culture. So far, the adherence to the patient safety guidelines is considered as an adherence to the accreditation guidelines and not as measures that help in minimizing errors and improving the outcome of patient care. This process will take time. We hope that by sharing these results with the staff with constant feedback in subsequent audits, they will realize the lack of a blame culture and be incited to report errors and compete with other wards to minimize the total number of errors.

References: -Lebanese Accreditation Standards

- JCIA 4th edition Hospital Standards
- Queensland Government Patient Safety Unit: **Audit tools for National Safety and Quality Health Service Standards.**