

Impact of patient and family education on infection control compliance at Gertrude's Children's Hospital

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Gertrude's Children's Hospital

- Established in 1947
- Head office located in Muthaiga, Nairobi county.
- 100 (+3)-bed hospital providing care to children from age zero to 21 years
- 12 outpatient departments; 1 head office and 11 satellites.
- Attends to over 300,000 children as outpatients and admits to over 6,000 patients on average per year.
- Over 90% of the admitted children are accompanied by parents/guardians.

Background

- Patient education is a significant component of healthcare in this modern era. It leads to improved patient safety and adherence to interventions (*Bartlett*)
- Patient and family education in healthcare is an area which has been neglected in many healthcare facilities (*Sheldon*).

Background cont..

- Significant number of patients and families have minimal knowledge on their disease and their role as partners in care.
 - This consequently affects their participation in care processes.

Background cont..

- Hospitals need to educate patients and families so that they have the knowledge and skills to participate in the patient care processes and care decisions (*JCI*)
- Patients stay healthier when they stay informed (*AMA*)
- Patient education is a patient's right and a health care provider's responsibility.

Background cont..

- Infection control is everybody's responsibility; patient and their families included.
- The purpose of this study was to determine the level of patient and family education on infection control at Gertrude's children's hospital inpatient section and its impact on infection control compliance.

HCAI Burden

- Each year approximately 5% of patients hospitalized in the US have an infection related to hospital care. (CDC 2011)
- Cost for inpatient care for the healthcare industry approaches \$45 billion annually. The burden for patients is even more costly. HAIs increase hospital stay to an average of 19.2 days. death rate from HAIs is six times higher than for patients without HAIs (CDC 2011)
- In developing countries diagnosis of HCAIs has been difficulty due to resource limitations but the burden is estimated to be higher than in developed countries (WHO, 2011).

HAI Burden conti..

- HAI can be prevented and the burden reduced by as much as 50% or more (WHO 2011)
- In Gertrude's children's hospital HAIs are a burden. Baseline for the study was 1.9/1000 bed days (5HAIs).

Problem identification

- RCA was conducted for the 5HAIs for February 2015;
 - For the 5 - no evidence for PFE on IPC. (100% noncompliance).
 - Rota virus infection patient – isolation precautions not implemented.
 - Unsafe practices by all the 5 care takers – due to lack of IPC education.
 - Poor hand hygiene compliance by HCWs.

Conti..

- Baseline audit; IP section.
 - HCWs Hand hygiene compliance – low, at 63%
 - PFE Compliance rate – 50%
 - Unsafe IPC Practices; CAUTI Bundle patient noncompliance and unauthorized visitation of other patient's rooms. – 13 reported incidents.
 - Hand hygiene reminders to staff by patients – 0
 - HAI rate - 1.9/1000bed days

Methodology

- The study was conducted at GCH inpatient
- Study period; February 2015 – July 2015.
- Structured patient and family education (PFE) tools were developed.
 - Infection control PFE orientation document
 - Specific write ups for patients in isolation
 - Specific write ups for patients with indwelling devices.
 - Summaries for patient and families to keep for further reference

Conti..

- Training nurses
 - TOT approach, use of IPC Links.
 - Sensitizations – morning briefs
- Follow up;
 - Spot checks and audits to monitor compliance
 - Management involvement; QPS Committee.

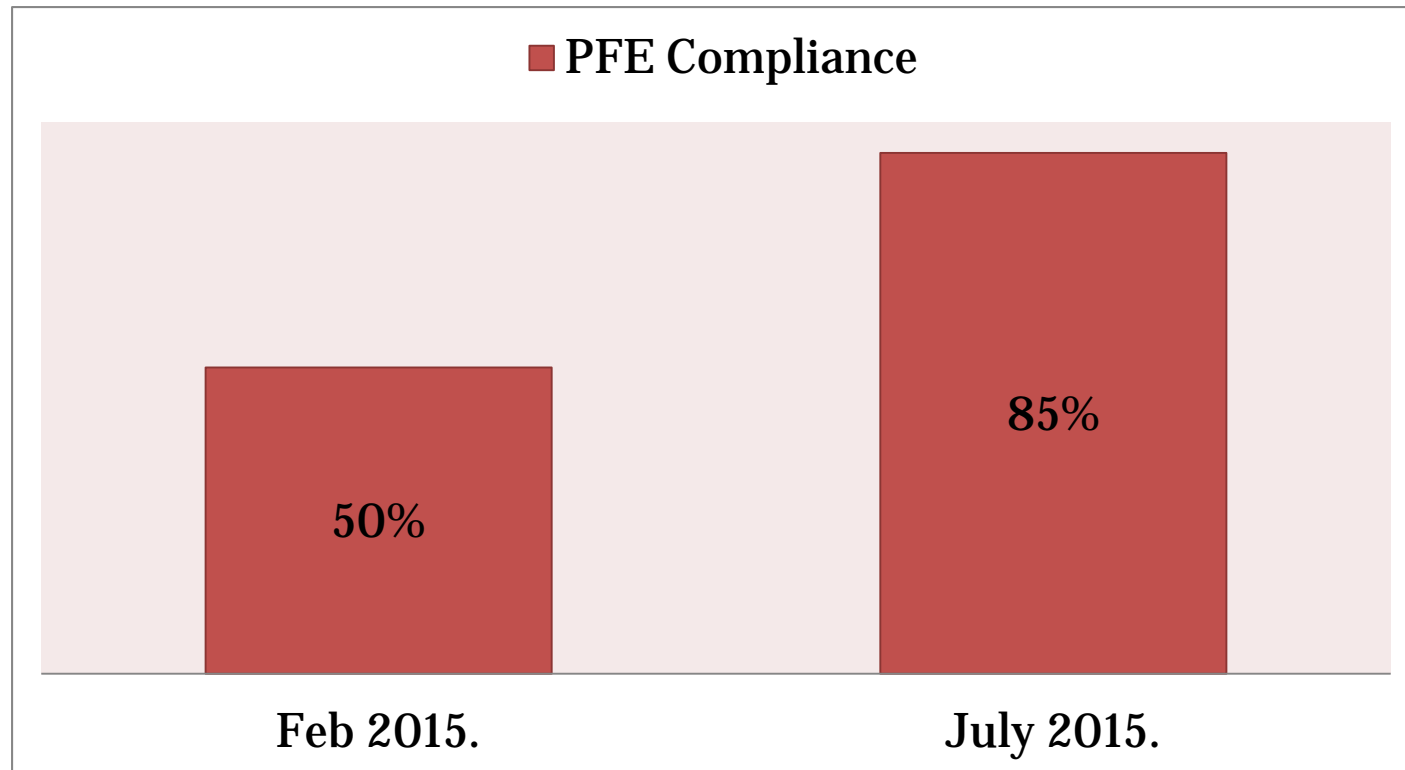
Conti..

- Hand hygiene (HH) activities
 - Hand hygiene sensitizations.
 - Patient empowerment as part of the orientation pack.
 - Personalization of the HH observation tool – for personalized feedback.



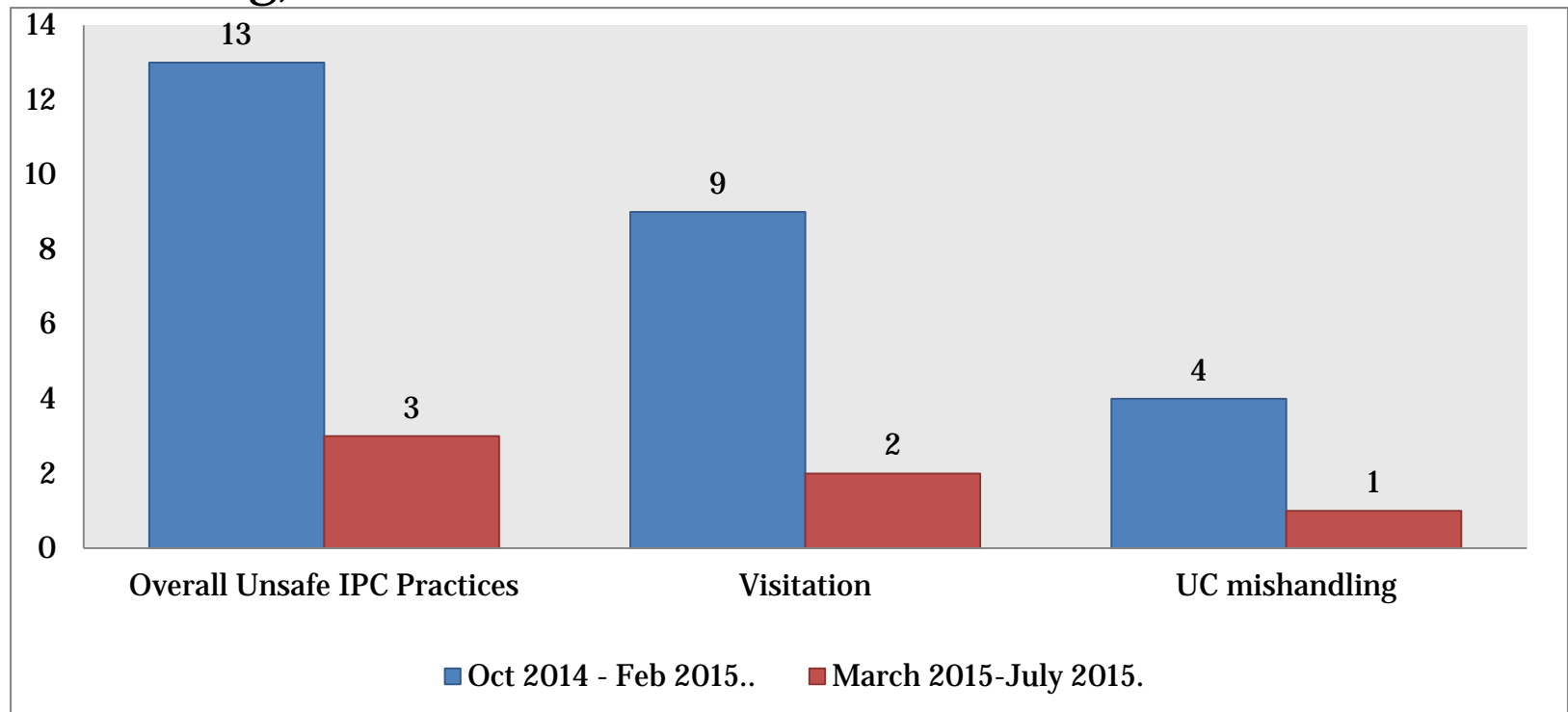
Results

- There was a 35% increase in PFE when standardized education process and tools were developed.



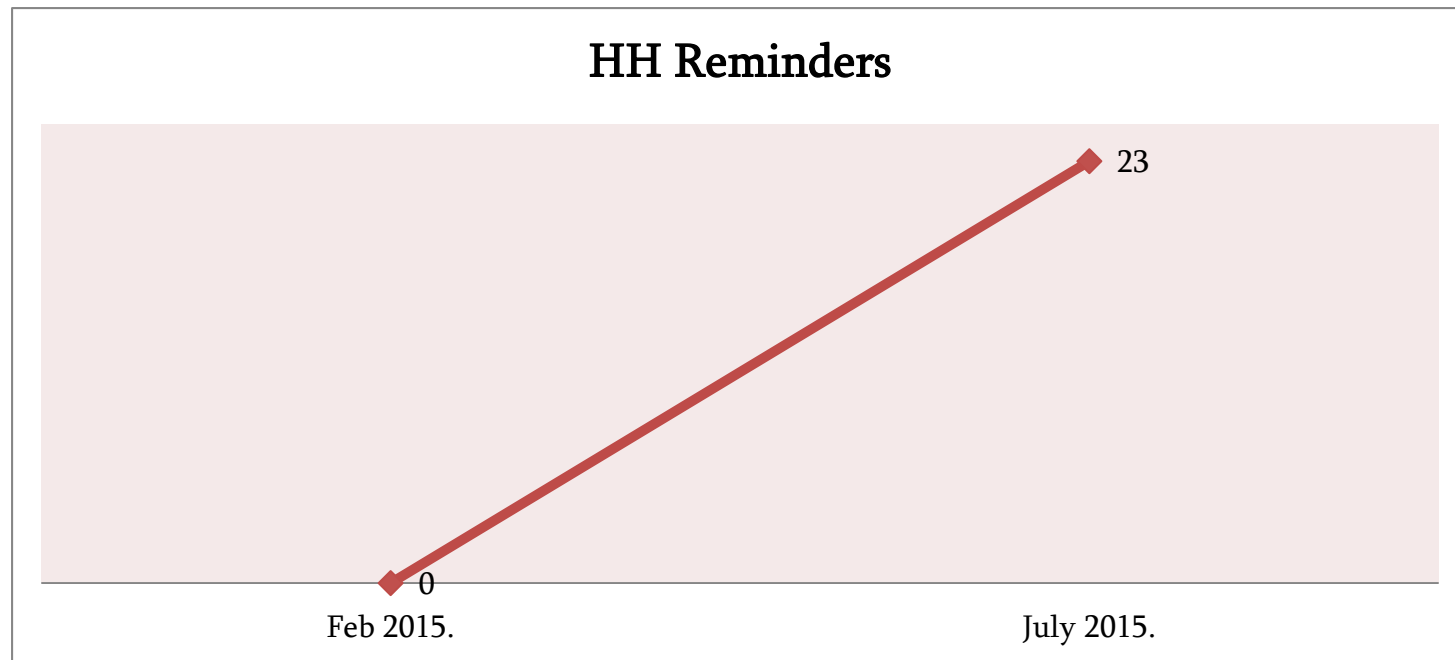
Results cont..

- The reported number of patients involved in unsafe IPC behaviors under this study (Visitation & Urine Catheter Handling) had reduced to 3 from a baseline of 13.



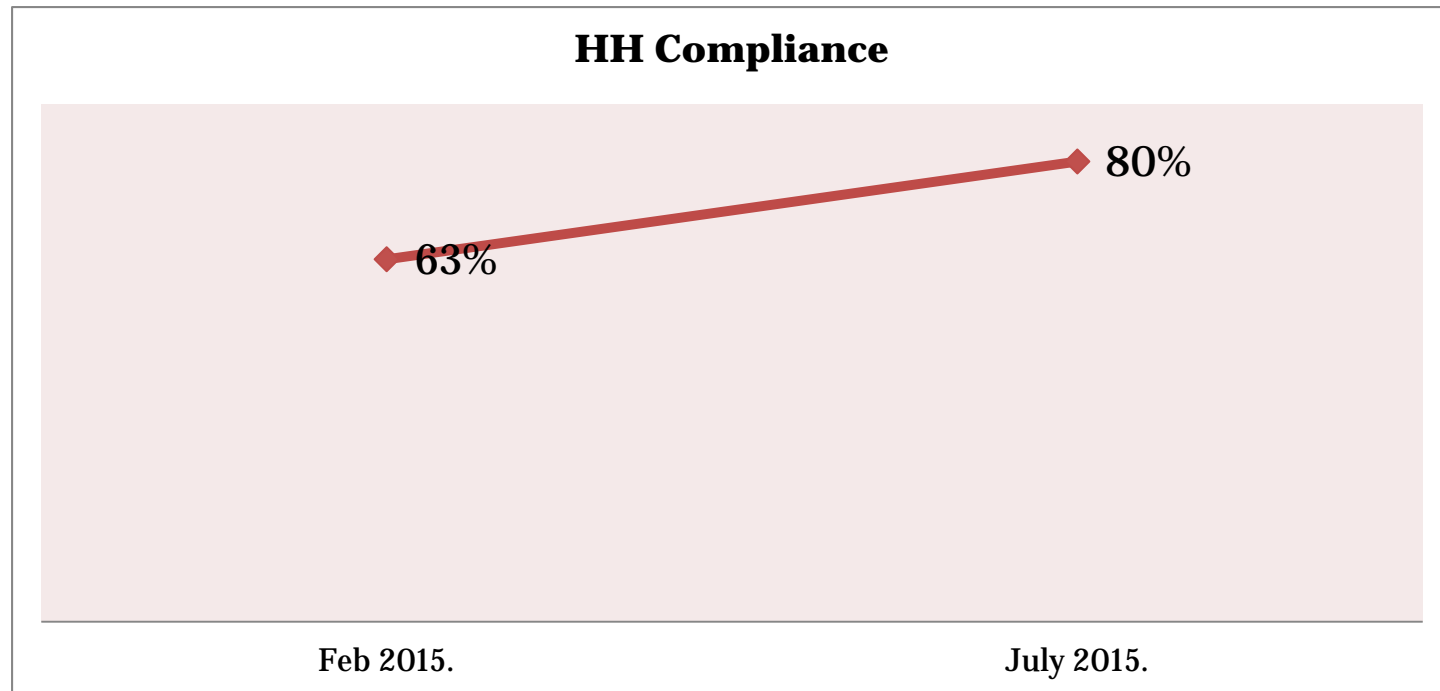
Results cont..

- 23 hand hygiene reminders to staff by patients were reported within 5 months from a baseline of 0.



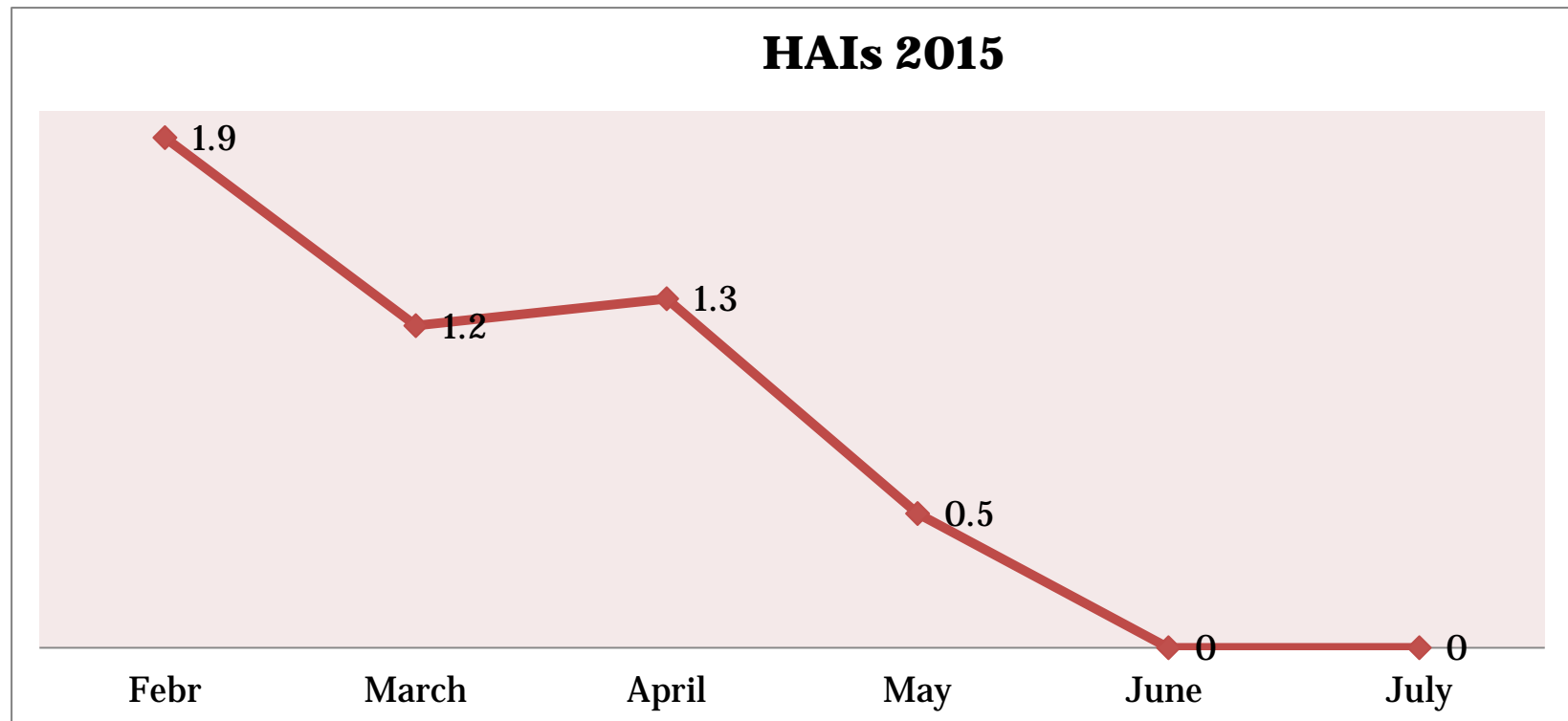
Results cont..

- Hand hygiene compliance rose by 17% during the study period.



Results cont..

- Reduced from 1.9/1000bed days to 0/1000bed days in July 2015.



Conclusion

- The results of this study show that IPC patient and family education has a significant role on infection control.
- PFE enhances safe practices from an informed point of view.
- Informed patients enhance safety by reminding HCWs on safety practices; hand hygiene.

Recommendations

- More research on patient and family education.
- In cooperation of patient and family education as a key component of infection control programs.

Acknowledgement

1. Almighty God
2. GCH Management
3. GCH IPC Committee and links.
4. GCH PFE Committee
5. IPNET - K

