# Learning from Defect: An Engaging Educational Journey Towards Patient Safety, Quality, Oxygen Therapy and Safety at Johns' Hopkins Aramco Healthcare Center in Saudi Arabia

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## Introduction/ Background

Even though there are evolving efforts committed for patient safety (PS) and quality care (QC), preventable harm is still a major concern worldwide. Oxygen Therapy (OT) is the standard care of hypoxemia management, despite which safety is considered a major concern specifically during patients' transitions/critical situations that can deteriorate patients' condition. The COVID-19 pandemic highlighted this with different issues relating to OT, the health system level and all stakeholders including patients/caregivers, health care professionals (HCP) and medical equipment providers. Those perceived the lack of knowledge/education as the main issue in the literature with a clear gap in the knowledge, attitudes and practices amongst all participants.

My involvement sadly as second victim prompted this project with my commitment/passion as a champion for PS/QC, speaking up, vowing 'never again'.

#### Aims

Implement the Comprehensive Unit-based Safety Program (CUSP) to:

- Identify the contributing factors of the defect
- Learn from the defect (LFD)
- Improve teamwork and communication using tools
- Build and improve (PS) culture, QC, OT safety and outcomes through an engaging LFD educational journey to all stakeholders where patient/family centered QC is priority
- Reduce preventable harm (aim zero)

## Methodology

In March 2019, this CUSP project started in the medical unit 5G as follows:

- Applied the LFD tool to real adverse incident.
- Engaged HCPs (team-discussions) to identify the problem/contributing factors via implementing tools (fishbone diagram) to improve teamwork/communication.
- Education/ training provided in safety's/ quality's science, OT safety for all stakeholders using different evidence-based educational forms where the focus is on patient/ family centered, QC).
- Partnering with management.
- Continue the LFD educational journey.
- Encouraging patients' and caregivers' feedback.

### Results

Different improvement areas were identified. Additionally, lack of proper patients' and caregivers' education about OT safety was noted from their direct enquiries/feedbacks and by checking with the respiratory therapy, medical supplies and shipping-receiving departments. This initiative presented (3 times, 2019-20) in JHAH's Medical Review Course, then expanded throughout the organization to all departments (inpatient, outpatient, EMS, procedural/imaging areas, dialysis, HHC, case management and rehabilitation) in the form of

- the followings: • Presentation including the case incident's LFD action plan, and general safety's science education (presented 3 more times then emailed the project to all).
- Summary presentation of PS Symposium 2020 shared with all.

- 2 posters as guides (regarding oxygen cylinder) placed where the instructions can be read and followed. Flyers were provided to all patients on Home OT; added to EPIC in the PDI and published in Health Encyclopedia (HE).
- Two patients and caregivers' educational materials published in HE.
- Stakeholders' positive feedback received.

#### Conclusions

Currently, CUSP improved HCPs' collaboration, teamwork, increased vigilance during transitions and critical situations. Additionally, enhanced workflow and safety culture's education, fulfilled accreditation requirements. Expected to reduce preventable harm, and improve PS, QC, health literacy while saving costs. The planned research (2021) aims to evaluate/expand this project.

## Bibliography

(AHCR 2019; AlMutairi, H. et al. 2018; Aloushan, A. F. et al. 2019; Fontanella, L. et al. 2010; Garvey, C. 2018; Jacobs, S.S. et al. 2018; JHM Armstrong Institute for Patient Safety & Quality 2014; Leotsakos, A. et al. 2014; Moore, D. 2019; NHS Improvement, 2018; Sculley, J. et al. 2019; WHO 2021;). For detailed references please contact the author at: Fatimah.abduljabbar@JHAH.com











