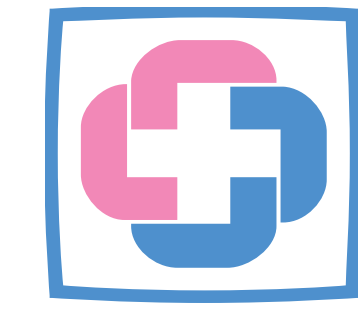




Preventive Strategies to Effectively Mitigate Children's Fall in the Inpatient Wards

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Introduction

Falls represent a major public health problem around the world. Falls are the leading causes of unintentional injury to children and has been considerable concern during hospitalization. A large number of children fell with their parents in attendance and despite interventions, fall rate incidence did not improve significantly. Researches done by a renowned hospital overseas showed that 20% of falls were due to inadequate communication with caregivers, 13% were due to inadequate assessment of fall risk status and despite implementing fall risk assessment tools and educational initiatives, there has been no significant improvement in the rate of fall incidents. In KK Women's and Children's Hospital (KKH) the incidents of fall among paediatric patients showed an increasing trend since 2014 (Graph 1). According to the American Nurses Association (2002), patient fall rates is one of the indicators that could be improved through nurse-led safety strategies or interventions. Thus, this project was initiated by the team of nurses with the aim of establishing a fall prevention program that effectively reduce fall incidents among children in the inpatient units of KKH.

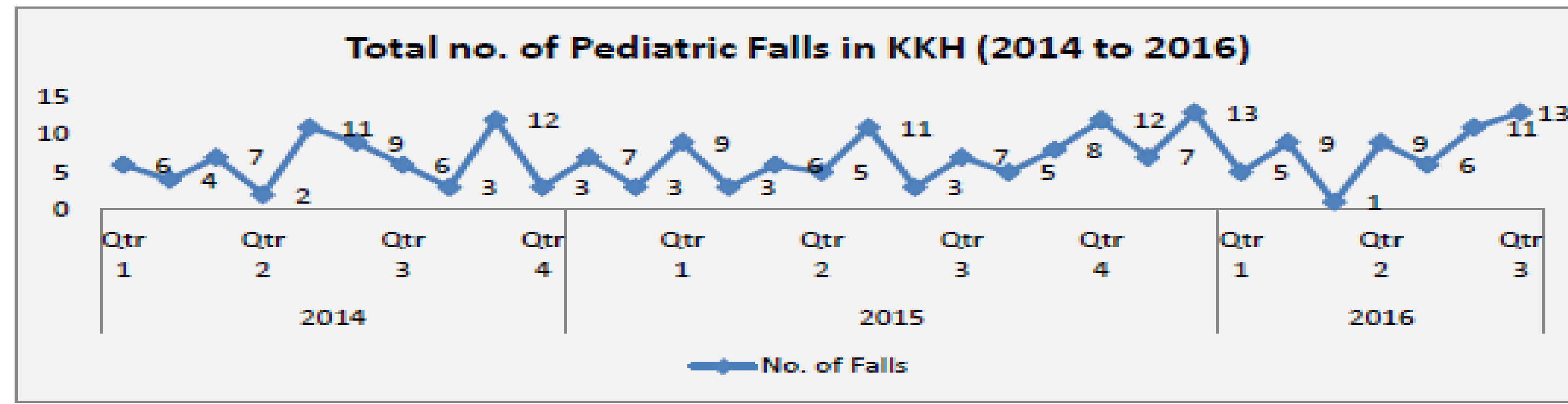
Aim

To establish fall prevention program that effectively reduce fall incidents among children in the inpatient units in KK Women's and Children's Hospital.

Methodology & Intervention

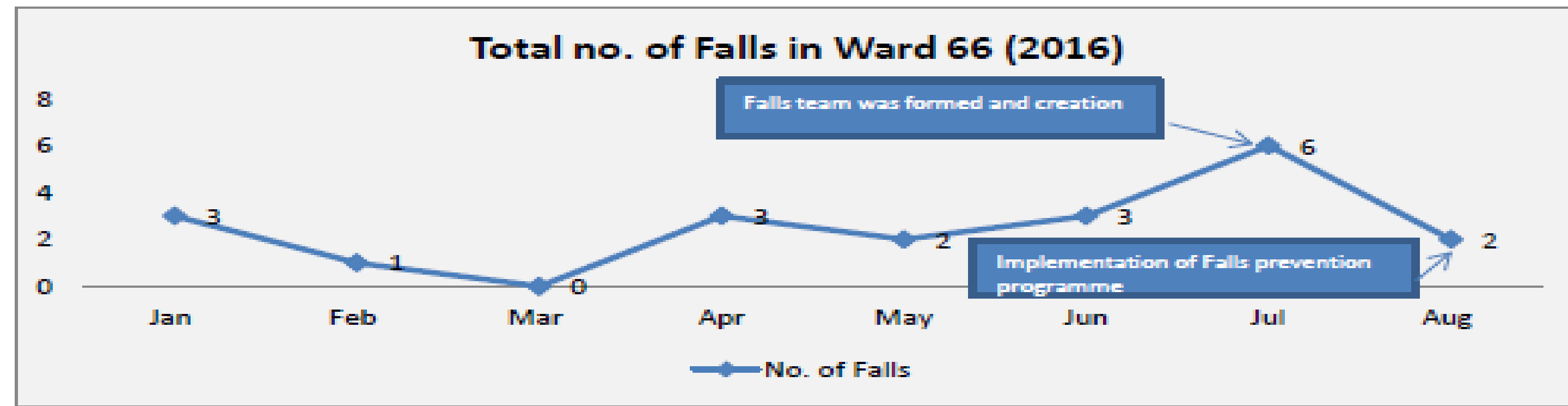
In July 2016, a fall team was formed and analysed the data on falls among paediatric patients in KKH from 2014-2016. As shown in graph 1, there is an increasing trend in patient's fall.

Graph 1



The team identified Ward 66, a paediatric medical ward, as the pilot ward. According to the fall incidents reported in the Risk Management System (RMS), there was a sharp increase in Ward 66 from Jan-Aug 2016. There were a total of 18 fall incidents as shown in Graph 2.

Graph 2



R-E-A-C-H stands for:

Reinforcement – use of positive/negative and repetitive reinforcement to encourage positive behaviour (as shown figure 1).

Reinforcement

Negative reinforcement ("Scare Tactics")

Positive reinforcement (Praise and Appreciation)

Repetition

Repetition as Reinforcement

- Orientation
- CARE rounding
- Every shift handover
- Each time a negative behaviour is observed
- "Fall Advocate"
- Neighbourhood Watch

Positive Reinforcement

Positive (Praise and Appreciation)

"Mr. Tan, we noticed that you remembered to raise the side rails up today. Well done and thank you for making the hospital a safe place for your child to be in."

Praising and appreciating them will help to reinforce on the positive behaviour.

Negative Reinforcement

"We are concerned that your child might fall and end up with an unnecessary injury prolonging hospital stay and incurring additional cost."

(Educate on the consequences)

Education includes use of safety brochures (figure 2a), orientation checklist (figure 2b), and Fall Pictorial Chart (figure 2c)

Figure 2a: Fall Prevention Brochure

Figure 2b: Orientation Checklist

Figure 2c: Fall Prevention Pictorial Guide

Fall Prevention Measures

Do's

- For assistance, use the call bell.
- Supervise play
- Be cautious when the floor is wet
- Fasten the seatbelt
- Ensure that cot rail and wheels are locked
- Use fitting footwear

Don'ts

- Never leave your child unattended with the side rails down
- Do not attempt to get down from the bed with the side rail up
- Do not allow your child to lean on or play with the overhead table
- No running in the ward and no playing with the curtains
- Do not allow your child to stand on bed and on chair
- No sharing of bed / cot / rollaway bed

Assessment of the environment includes 2-hourly nurse rounding, keeping environment free from obstacles, ensuring proper lightings, and pull-back of curtains.



Communication between healthcare professionals and parents is key in creating a safe environment for the children to be in. We have adopted the CUS model in helping us to achieve effective communication with the parents. We can use words such as, "I am Concerned, I am Uncomfortable, and this is a Safety issue" (as shown in figure 3). There is a video created to demonstrate the use of CUS model and was played during roadshows, CEO-CMB forum and Fall Precaution Awareness Week.

CUS Communication model

I am Concerned! **I am Uncomfortable!** **This is a Safety issue!**

Adopted from TEAMSTEPS

Role play using CUS model

Guided Response For Nurses

Nurses' Response

- Eye contact
- Start by using positive words
- Establish interest in caring for the patient
- Use questions to direct preferred behaviour
- If parents repeatedly lower cot sides, escalate to a request
- Additional anticipatory care behaviour: Offer to re-orientate on fall safety precautions

Figure 4

Hospital Fall Risk Assessment Tool:

- Patient Specific
- Identify and discuss at general handover
- Discuss what risk minimization factors have been implemented. Involve parents/caregivers in discussion
- Discuss if the Humpty Dumpty is completed and up to date.

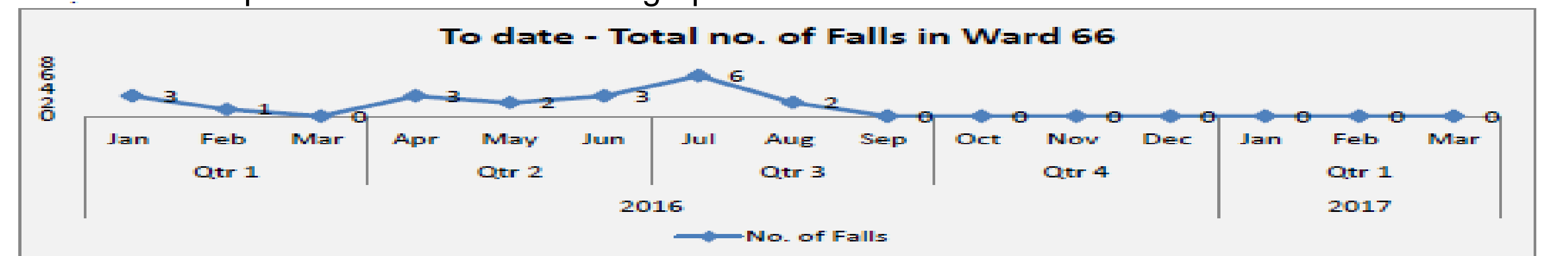
The team created a sample communication reference guide for nurses entitled "Guided Response for Nurses". These guides include how nurses' response during conversation with patients, anticipatory caring behaviour based on 5 different case scenarios: Cot/Bed rails; Visitor chairs; Roll Away bed; Running in the ward; and Pram.

Hospital Fall Assessment Tool – the HUMPTY DUMPTY Scale (Figure 4) was used to assess the risk of fall and the appropriate measures to be initiated.

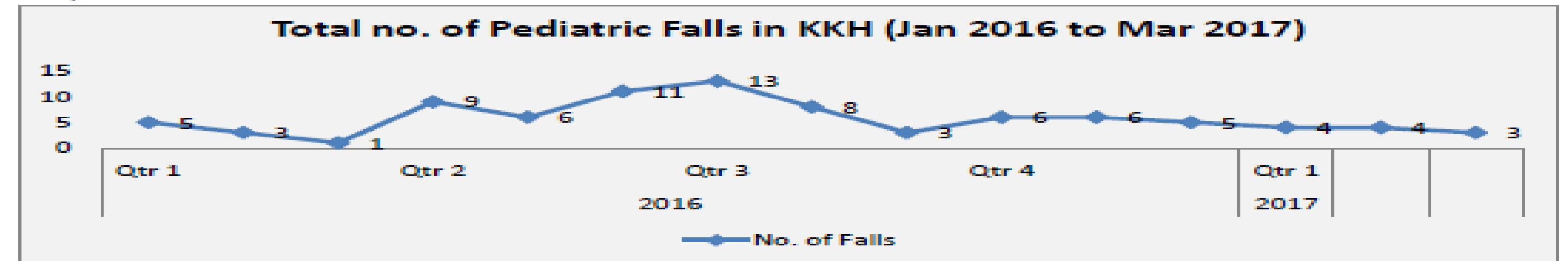
Result

After the implementation of R-E-A-C-H, there was a proactive prevention of fall in Ward 66. There was no reported fall incident from September 2016 to April 2017 as reflected in the department's synergy board. Knowing the root cause of falls enabled the team to create strategies tailored to the specific group of patients and the stakeholders inputs has provided a holistic approach to the problem. The initiation of the fall prevention strategies has reaped the following benefits:

- Achieved zero patient falls after the implementation of the programme from August 2016 up to present as shown in graph 3.
- The success of this new initiative was spread and implemented across the entire inpatient wards in the Children's tower and there is a significant reduction in the number of hospital paediatric falls after the implementation as shown in graph 4.



Graph 4



Conclusion

Paediatric fall prevention is one of the focal point of nurse led endeavours at KKH. This fall prevention program has been implemented, tested and proven to be an effective tool in the prevention of unintentional injury due to falls in ward 66. The project was spread throughout the entire Paediatric Wards and after its implementation, there was a significant decrease in the number of falls in KKH (as shown in Graph 4).

