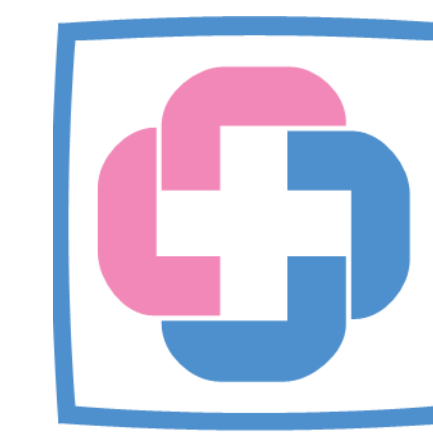




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Partnership in Care – Self-Help Milk Preparation



KK Women's and Children's Hospital
SingHealth

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Background

Traditionally, nurses in KK Women's and Children's Hospital (KKH) are routinely assisting caregivers in preparing milk feeds. This non-clinical task for the patients throughout the day has taken up a substantial amount of nurses' time, which could be channelled to better use in performing and focusing on other nursing care related responsibilities. For e.g. Nurses were often disrupted by caregivers from their nursing care duties to prepare milk for the patients. These disruptions happened most frequently during morning doctors' and medication administration rounds. Without full concentration, there could be possibilities of delayed treatment or occurrence of medication errors. Patient safety might potentially be compromised due to nurses diverting their attentions to caregivers on milk preparation.

Aim

The fixated mind-sets that relevant stakeholders perceived - nurses should prepare milk or caregivers cannot prepare milk must be revolutionized. A team was formed to work towards promoting an efficient and excellent service, yet safe process for our patients with the establishment of a self-help milk station at the patients' pantry. We hope to reduce the time taken for nurses to prepare milk significantly through the convenience of the new set-up can provide as caregivers could prepare milk without needing nurses' assistance.

Methodology

The pantry was re-organized to facilitate the milk preparation process. The changed workflow was first disseminated to nurses, and during ward orientation upon admission of new patients, they re-educated the caregivers to help themselves with the formula milk in the pantry. Milk powder were made easily accessible in the overhead cabinets and caregivers were told to do hand washing before preparing milk. Prominent signage on hand washing was put up as a measure to ensure that the changed practice was safe.

However, the likelihood of milk contamination persisted if caregivers did not practise strict hand hygiene. A milk dispenser was a spin-off from the new set-up, whereby umpteen trial and errors were conducted through 3-D printing technologies to measure in precision, a single flick of the handle would equate to a scoop of milk powder. This milk dispenser totally eliminated the caregivers' direct contact with milk powder and reduced the possibility of milk contamination significantly.



The milk dispenser developed by our Medical Innovation and Care Transformation (MICT) Data Engineer

Results

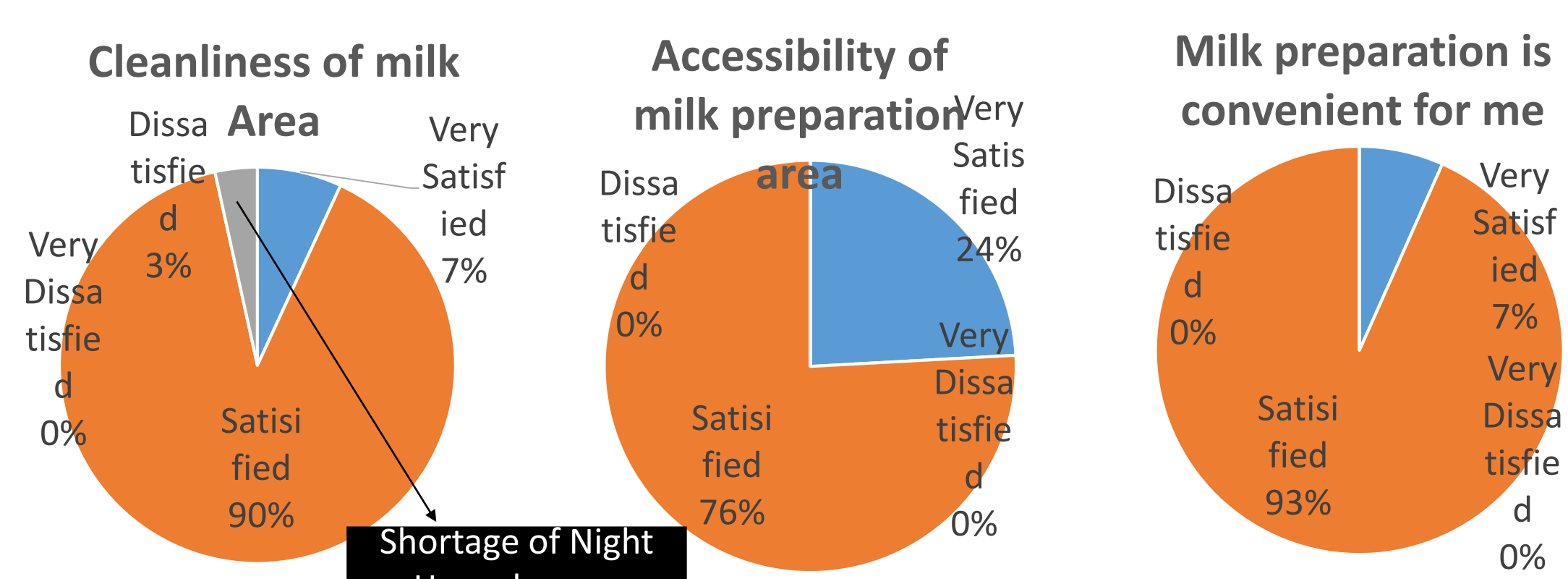
Pre-implementation showed that the total no. of milk feeds amounted to 753, which equated to **4,864.38 minutes** spent. At week 1 during implementation, out of 454 milk feeds, 168 of them were prepared by nurses. Time spent accounted to 1,847.56 minutes. By week 2, nurses prepared 174 feeds out of the 426 milk feeds which translated to 1,627.92 minutes. In total, **3,475.48 minutes** was spent by nurses; a reduction by **28.5%** in time spent by nurses in milk preparation.

Conclusion

Reducing time spent for nurses in performing non-clinical tasks became imperative, which spurred the formation of the self-help milk station. This approach was a classic example of the achievement of our hospital's strategic priorities on "Doing More with Less". With this new initiative, it also fostered parent-child bonding and promotes continuity of home routines during hospitalization. There are plans to spread this initiative to all paediatric wards and to further develop and market the milk dispenser commercially.

Feedback from Caregivers

Almost **95%** of Caregivers' experiences were satisfied and very satisfied with the self-help milk station on the below aspects:



Feedback from Staff

How has self-milk for caregivers benefited the Nurses

