Correct Preparation & Re-warm of Bottle Milk: Promote safety and reduce risk of illness in Surgical Department, PWH

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Introduction
The World Health Organization (WHO) recommends infants to be exclusively breastfed for at least first six months of life to achieve optimal growth. Also, Baby Friendly Hospital has been fully implemented in the Department. Unfortunately, due to various surgical problems or constraints, some patients admitted to Paediatric Surgical wards (7LM) or Burns Centre in PWH cannot continue to breastfeed. Expressed breast milk or powdered formula will be provided to patients who cannot be breastfeed directly or contraindicated for breastfeeding. As powdered formula is not sterile, wrong preparation and handling will increase the risk of illness. Besides, incident of broken of milk bottle due to improper techniques in re-warming has been occurred. Knowledge enhancement on safe preparation and re-warm of bottle milk in both units are necessary.

Objectives

Methodology
The program of "Knowledge enhancement on safe preparation and re-warm of bottle milk" was organized and implemented in both units on October, 2015 for all nurses, supporting staff and paediatric surgeons. Intensive training classes with guideline and specially designed worksheets were implemented. Five multiple choice questions included all the important safety aspects were designed for assessment of staff knowledge before and after the training. Program evaluation was performed and feedback from staff obtained.

Result
The program has been completed successfully in January 2016. A total of 79 staff (nurse:45, supporting staff:22, paediatric surgeon: 12) were recruited. In the pre-test, only 58 staff (73%) was passed (3 marks or above), mean score was 3.2 (range: max.:5, min.:1) (S.D.=1.09). After the training, all staff (100%) passed the post-test
with mean score: 4.7 (range: max.:5, min.:3) (S.D.=0.60). The overall results of pre-test and post-test comparison were significant (two sample independent t-test p-value<0.0001). Individual units’ (7M/7L/Burns Centre vs nurse/supporting staff) comparison results were also significant with p-value<0.05. Besides, with the analysis of the weak question, staff was strongly educated to throw away any re-warmed milk that has not been consumed within 2 hours. Over 95% staff has gained confidence in milk preparation. No incident related to wrong preparation of milk recorded. Risk of illness has been reduced and patients’ safety improved.