23rd Annual Congress on

PEDIATRICS & NEONATOLOGY

November 05-06, 2018   Bangkok, Thailand

A pilot study on the effectiveness of basic emergency obstetric and newborn care training done at a tertiary hospital in Philippines from January 2015 to December 2016

Azenith L Tammang
Tertiary Hospital, Philippines

Background & Aim: The Philippines is struggling to avert maternal and neonatal mortality and morbidity due to childbirth complications requiring emergency obstetric and neonatal care. The conduct of Basic Emergency Obstetric and Newborn Care (BEmONC) training for health providers is a strategy towards this end. The study assessed the effectiveness of BEmONC trainings at a tertiary hospital from January 2015 to December 2016. It is a longitudinal study with pretest-posttest research design that measured knowledge-based mastery at immediate post-course and six months after the training. 609 BEmONC participants composed of two groups: Group A: 443 all midwives trainees, Group B: 166 trainees trained as teams (61 physicians, 52 nurses and 53 midwives).

Method: Convenience sampling method that applied Kirkpatrick's model and used the standard pre- post-test questionnaires and 6-months post evaluation form to assess participants' learning and application of skills/knowledge gained. Frequencies, percentages, range, mean±SD, median and mode were used for descriptive analysis, while t-test and chi-square tests were used for statistical significance at $p<0.05$.

Result: 91% of Group A and 55% of Group B were satisfied with the course. The pre-and post-test scores of participants showed increased level of knowledge (Group A: 50% to 59%; Group B: 65% to 69%) found to be significant at $p<0.05$, d.f=441 for Group A ($p=0.000$) and $p<0.05$, d.f=164 for Group B ($p=0.001$). But, the increase in knowledge failed to achieve knowledge-based mastery of BEmONC, with 98.2% and 68.1% of Group A and Group B, respectively having post-knowledge scores below 76%. Post-training score and profession were significantly associated (derived $X^2=36.7$; $p=0.000$), but not with sex, age and years of service ($p=0.446$, 0.891 and 0.354, respectively). Partograph, EINC, Unang Yakap, $MgSO_4$ administration and management of stages of labor were learnings most frequently used by the 18 post-evaluated facilities. Only 13 facilities passed post-evaluation, while 5 failed. OB-related referral significantly decreased in 12 facilities (derived t-value=2.355 vs. tabular t=2.145; $p=0.034$) before and after the training. Poor performance of essential newborn care (mean assessment score=1.88) was the major barrier for favorable outcome of BEmONC training, including among others, absence of birth plan, shifting schedule, emergency numbers, waste management, emergency lights and unavailability of basic equipment and sanitized delivery and recovery rooms.

Conclusion: BEmONC participants were predominantly female, midwives, aged between 41 to 50 years old and in service for 1 to 10 years, has never attended previous BEmONC trainings. Majority of its trainees believed that course objectives were achieved and course expectations were met, hence, increased their knowledge level. Majority were generally satisfied with what they have learned and observed. Post-training assessment is incomparable to pre-training due to difference of assessment tools that were used; therefore further statistical analysis was descriptive. 10% of participants achieved knowledge-based on mastery of BEmONC. The study concluded that, there is a significant difference in the OB-related referral of facilities that were post-evaluated 6 months after the BEmONC training. However, readiness of participants' facilities and favorable training outcomes are hampered by barriers such as poor performance of essential newborn care and absence of basic necessities, equipment, sanitized delivery and recovery rooms, among others.

tammy_azenith@yahoo.com