Evaluation of the effectiveness of certified dispenser-led inhaler technique counselling sessions at out-patient setting of Our Lady of Maryknoll Hospital

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Introduction
Proper inhaler technique is vital to the disease management of asthma and chronic obstructive pulmonary. With ever-evolving inhaled devices and substantial patient population-in-need, an expanded role of Certified Dispensers in inhaler technique counselling under pharmacists’ support in training as well as in handling complicated cases can be an effective service model with improved service accessibility and better utilization of skill-mix in achieving improved therapeutic outcome. Patient need can, in turn, be better met with more competent counsellors.

Objectives
This study evaluated the effectiveness of certified dispenser-led counselling sessions on inhaler technique at out-patient setting in educating patients referred by other healthcare professionals or pharmacy staff for learning/improving inhaler technique. It provided the first local data regarding Certified Dispensers in provision of independent, consistent and thorough inhaler technique counselling to outpatients who incorrectly use the prescribed inhaled devices.

Methodology
Dispensers received comprehensive in-house training by pharmacists under ‘Advanced Inhaler Technique Counselling Certification Program’. After certification, they performed independent assessment and detailed counselling on inhaler technique for new and current users at out-patient pharmacy counter in OLMH. Re-assessments and interventions were performed at next medical follow-up.
Result
Sixty-six subjects (out of 77, 86%) completed two counselling sessions from 6th November 2013 to 27th November 2014. In current user group (n=33), baseline mean demonstration score was 5.3 out of 9. The score was significantly increased to 8.8 out of 9 after first counselling session, with a net increase of 3.5±2.4 (39%, p<0.00001). The mean demonstration score dropped by -1.2±1.5 (-13%) after the first and before the next follow-up counselling session (p=0.0009). After the follow-up counselling session, the mean demonstration score increased by 1.3±1.5 (14%, p=0.0005). In new user group (n=33), the mean demonstration score after the first counselling session was 8.9 out of 9. The mean score dropped to 7.3 out of 9 before follow-up counselling session, with a net decrease of -1.6±1.6 (-18%, p=0.00004). After follow-up counselling session, the mean demonstration scores increased by 1.6±1.6 (18%, p=0.00007). The results proved quality assurance of inhaler technique counselling service by Certified Dispensers under pharmacists’ support. With only 4 cases (6%) demanding pharmacists’ further follow-up, the service model is proved to be effective.