

## World Medicine 2018: Level of agreement among various health care stakeholders on collaboration between Community Pharmacist (CP) and General Practitioner (GP) for a Collaborative Medication Therapy Management (CMTM) model for Chronic Diseases (CDs) in Malaysia: A Delphi study

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### Abstract

**Objective:** Current study is the first attempt to build consensus and appraise the level of agreement (or disagreement) among various health care stakeholders on the possibilities of a CMTM model for CDs in Malaysia through Delphi technique. **Method:** This Delphi study was conducted as per the COSRT guidelines. Based on a systematic literature search, an online survey was designed on QuestionPro (an online survey tool). After face and content validity of the survey, an expert panel was constructed by inviting various health care stakeholders in different organizations and professional bodies which represent GPs, CPs and Nurses, across Malaysia. Survey had 96 statements to rate using 5-point Likert scale (strongly agree to strongly disagree) and 36 ranking statements where experts were asked to rank in terms of feasibility of various aspects of the CMTM model. Consensus was pre-defined to be the point where >85% of the respondents falls in either agree or disagree category for each statement. Delphi operates in a reiterative fashion in rounds, where at the end of each round aggregate response (pooled opinion in the form of percent agreement among panel members) is presented to all experts and asked to reconsider their response in the light of the reasoning of other experts and aggregate response, if it appeals to them. This reiteration continues till there is stability (no change) in the response of experts in two consecutive rounds. Response rate was 70.73% and 100% for 1st and 2nd round respectively.

**Results:** The percentages, Median and Interquartile Range (IQR) were calculated on the responses of experts at the end of the first round and it revealed that consensus was achieved on 105 statements and there was conflict over 27 statements. In round-2, 14 statements out of 27 conflicted statements reached the consensus after due considerations of the experts, while, 13 statements failed to stretch up to consensus. No further round was executed, as after round-2 stability in response of experts reached to 100% (Wilcoxon Signed Rank test). The inter-rater agreement was computed in both rounds using Intra-class Correlation Coefficient (ICC) (Two-way mixed model-absolute agreement,  $p < 0.001$ ) that is interpreted to be in between good to excellent level of agreement. Further subgroup analysis based on profession (GP, CP, Nurses) was carried out using Kruskal Wallis H-test ( $p < 0.01$ ), while differences in response based on experience and education were analyzed using Mann-Whitney U-test ( $p < 0.017$ ). **Conclusion:** This study demonstrates a significant level of agreement among different health care professionals for a future role of CPs in CMTM model of CDs. Generally, there is a consensus to at least run a pilot trial of this CMTM model in major cities of Malaysia. It also highlights certain flash points where there were differences. However, study holds importance for policy makers, as the agreements or disagreements expressed in the survey may be utilized to foresee and generate guidelines and strategies to lay the foundation of a CMTM model for CDs in Malaysia.

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