Exploring e-health literacy and medication adherence in patients with diabetes

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Background An increased use and reliance on technology to access health and medication related information as means of facilitating medication management is an important consideration for patients with chronic conditions such as diabetes. This is particularly relevant considering the high medication non-adherence rates in patients with chronic conditions such as diabetes as well as variations amongst diabetes patients in terms of their technology use.

Purpose This study aims to explore the relationship between e-health literacy and medication adherence in patients with diabetes.

Method A mixed methodology approach was employed in order to survey and interview patients with diabetes. E-Heals was used to assess patients e-health literacy and additional open-ended questions were used to assess patient?s basic medication adherence. This was done separately for oral diabetes medications, insulin and other medications

Findings We interviewed a total of 56 patients with diabetes. Of these, six were on insulin therapy only and 24 of them were taking only oral therapy hypoglycemic therapy, with the rest being on combination therapies. Presence of insulin therapy was positively associated with increased adherence rates. We identified reasons of medication non-adherence in this population group and also perceived facilitators to overcome non-adherence. Interview findings suggest that patients? adherence would benefit from having a person to remind them about their medication intake. Overall, we noted low levels of agreement in eHeals questions with majority of participants being undecided in relation to finding online health related information (85.5% undecided), health resources (83.6% undecided), as well their utilization (85.5% undecided). Participants were also undecided in relation to evaluation of online health information and resources (87.3% undecided). Highest eHeals agreement levels were noted on usefulness (38.2% agreed/strongly agreed) and importance (29.1% agreed/strongly agreed) of the internet to make health decisions

Conclusion Our findings indicate that insulin therapy is positively associated with medication adherence, compared to non-insulin participants. High proportion of undecided responses to eHeals statements indicate possible low eHealth Literacy levels amongst patients with diabetes, suggesting a need for improvement and further research with the view of addressing the medication non-adherence issue in patients with diabetes.