The Influence of Health Literacy, Hypertension-Specific Knowledge, Patient Activation, and Adherence on Blood Pressure

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Purpose: The purpose of the study was to explore the relationship between health literacy, hypertension-specific knowledge, patient activation, adherence to hypertension treatment plans, blood pressure control, and other important demographic factors (i.e. age, gender, comorbidity, education, and income). Additionally, this study examined whether hypertension-specific knowledge mediates the relationship between health literacy and patient activation

Methods: A descriptive, correlational design was used in this cross-sectional study. Data were collected using The Short-Test of Functional Health Literacy in Adults, the Brief Health Literacy Screen, the Hypertension Knowledge-Level Scale, the 13-item Patient Activation Measure, and the Hill-Bone Compliance to High Blood Pressure Therapy. The participants of this study involved 114 patients diagnosed with hypertension. The sample was drawn from primary healthcare centers in Riyadh, Saudi Arabia.

Results: Pearson correlations revealed that greater hypertension-specific knowledge and better adherence to hypertension treatment plans were significantly associated with lower systolic and diastolic blood pressure. Furthermore, age and gender were significantly correlated with patient activation, adherence to hypertension treatment plans, and diastolic blood pressure; education and income with health literacy. Additionally, adherence was significantly correlated in a positive direction with education and income. In the hierarchical regression analysis, 37% of the variance in adherence to hypertension treatment plans was explained, primarily by hypertension-specific knowledge and age. Accordingly, adherence to hypertension treatment plans was found to be a significant predictor and explained 26% of the variance in systolic blood pressure and %30 of the variance in diastolic blood pressure. Statistical analysis for logistic regression revealed that several independent variables/covariates were found to be significant predictors the dichotomous outcomes: higher/lower a) systolic and b) diastolic blood pressure. Participants with better adherence were 1.39 times more likely to be normotensive and have systolic blood pressure <140 mmHg. In addition, participants with greater disease knowledge were 1.30 times more likely to have lower systolic blood pressure. Conversely, Older participants were .91 times less likely to have normal systolic blood pressure.

Conclusion:
Findings from this study can serve as a starting point for additional studies about these factors in Saudi Arabia and can provide a conceptual model for more research into hypertension self-management and control across the Middle East. The study results indicate that more than half of the participants had poor blood pressure control. Further

descriptive, correlational studies need to be conducted to look at other factors correlated with increased blood pressure control, such as perceived family support and patient-healthcare provider relationship.

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Keywords:
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Abstract Summary:
By the end of the session, participants will be able to identify factors contributing (i.e. hypertension knowledge, patient activation, adherence to treatment plans) to successful hypertension self-management. Additionally, they will be able to integrate the Individual and Family Self-management Theory into practice aimed at improving proximal and distal clinical outcomes.

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