ASSESSMENT OF PRIMARY CARE PHYSICIANS’ ADHERENCE TO JNC 7 GUIDELINES IN MISSISSIPPI (MS): JACKSON METRO AREA AND THE MS DELTA

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Abstract: Appropriate treatment of hypertension is the cornerstone to positive health outcomes, specifically, the reduction of blood pressure to target and prevent hypertensive related complications such as kidney disease. Each year in the United States (US) high blood pressure leads to more than 50% of all heart attacks, strokes, and heart failure occurrences, and increases the risk of kidney failure and blindness. From 1988-1994, in the US, an estimated 40% of the 50 million persons with hypertension were without treatment and 66% of them had blood pressure values that were not controlled to the recommended levels. Though the Joint National Committee on Prevention, Detection, Evaluation and Treatment of High Blood Pressure (JNC) guidelines are the recommended standard of care, two-thirds of hypertensive patients have uncontrolled blood pressure. Physician evaluation is paramount in the care delivery system for hypertension, however, adherence to guideline recommendations is lacking. The following factors influence physicians’ treatment behavior or adherence to treatment guidelines: lack of familiarity or agreement with specific guidelines, expectation of outcomes, and therapeutic inertia. Given the literature research on the subject of physician knowledge of JNC 7 guidelines, this study was designed to assess the level of adherence of hypertension treatment guidelines by Mississippi physicians. A secondary objective was to identify the determinants of adherence and compare physicians in well served (metro Jackson) and underserved (MS Delta) communities. A 22-item survey was developed. Using the Delphi method, the instrument was refined with the consultation of two primary care physicians. The questionnaire was mailed to 254 physicians – 174 in metro Jackson and 80 in the MS Delta. Descriptive statistics and chi-square tests were performed at a significance level of 5% using SAS. The response rate was 33%. The following characteristics are descriptive of the respondents: 78.7% male, 80.9% were in internal medicine (48.9%) and family practice (31.9%), and 74.5% practiced in metro Jackson. The percentage of physicians who had reviewed JNC 7 and JNC 6 were 76.7% and 86.2%, respectively. There was a significantly positive correlation between physicians who had read JNC 6 and 7 (r=0.782, p<0.0001). Findings from this study do not support the literature in terms of low adherence to hypertension treatment guidelines by physicians. With limited sample size, there were no gender, geographic and age difference in the adherence to JNC 6 and 7.

Keywords: JNC, hypertension, anti-hypertensive therapy, Mississippi, adherence, primary care physicians, Metro Jackson, Mississippi Delta