PS3-48:

Assessing Appropriate Treatment of Familial Hypercholesterolemia in Children

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Background/Aims: In 2008, the American Academy of Pediatrics promulgated guidelines to identify and treat children with life-threatening elevations in low density lipoprotein cholesterol, aka familial hypercholesterolemia (FH). FH is fairly common with heterozygotes characterizing roughly 1/500 births. Primary treatments are lifestyle modification and antilipemics. The 2011 expansion of NHLBI guidelines to include universal pediatric screening fueled the controversy of medicating kids with predictions of "an epidemic of…lipid-lowering drug therapy," implying some are wrongly treated. While debate abounds, there are no data on the effects of the 2008 guidelines. Datasets large enough to have significant numbers of FH kids or robustly populated with relevant data are rare. The HMORN Virtual Data Warehouse (VDW) is an exception. We hypothesized that (a) the 2008 guidelines have not influenced medication use or FH identification, and (b) common healthcare disparities correlate with likelihood of therapy. **Methods:** This exploratory study of children 2-20 years old in the Scott and White VDW will use a time-series design to study the cumulative proportion treated and yearly rate of new treatment, comparing 2005-07 vs. 2009-11. Over the same periods, we will also identify temporal trends in FH diagnosis and its sociodemographic correlates. **Results:** We use standardized data definitions and data abstraction methods developed as part of the Cardiovascular Research Network (CVRN) VDW. Data abstracted include pharmacy claims; ICD-9 diagnosis; and predictors: age, sex, race, obesity, socioeconomic status, geographic region, urban vs. rural practice area, family history of cardiovascular disease, and provider characteristics. Primary analysis will compare the proportion treated with lipid-lowering therapy pre-2008 vs. post-2008 using multivariable adjusted regression models (logistic for proportions or Poisson for rates) to identify correlates of therapy or diagnosis and association with implementation of the 2008 guidelines as evidence of change in indications. Secondary outcomes will be treated similarly. **Conclusions:** The CVRN VDW represents a unique resource to ascertain if pediatric lipid treatment is being rationally applied consistent with published guidelines. This pilot study may identify VDW construction and population issues that interfere with addressing this data gap.

Keywords: Dyslipidemia; Pediatric; Guideline-Concordant Care

doi:10.3121/cmr.2013.1176.ps3-48

PS3-50:

Ethnicity and Factors Associated with Medication Adherence in a Post-Discharge Medical Aid Program

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Background/Aims: Initial adherence to prescribed medications immediately following hospital discharge represents a crucial treatment phase, significantly affecting the course of care and subsequent readmission risk. Numerous psychosocial factors influence adherence, particularly in vulnerable populations such as patients with lower health literacy and few healthcare or economic resources. Race/ethnicity is frequently associated with poor adherence and may detrimentally interact with issues surrounding important self-care behaviors. Within a cohort of medical aid program recipients, our pilot study objectives were to examine potential ethnic disparities in several factors pertaining to early adherence, supporting efforts to design tailored interventions to improve hospital transition care and outcomes. **Methods:** Within 15 days of discharge from one Scott & White Healthcare facility, adult participants (n = 90) completed surveys soliciting demographics and several instruments including medication adherence (Morisky 4-item), health literacy (REALM-SF), and depression (CES-D), along with perceptions of treatment engagement or self-activation, social support, personal competence, and quality of hospital transition care. Among these Medicaid recipients, preliminary bivariate analyses examined differences by race/ethnic group, supporting ongoing regression and structural equation models. **Results:** The sample was 62% female, with a mean age of 50.4 (sd = 13.5); 56% were White, 26% African-American, while one-fifth reported Hispanic ethnicity. Most patients reported medium (38%) or high adherence (49%), white patients having a greater prevalence of the latter category despite endorsing higher depression levels. The only statistical difference was lower scores in minority patients for treatment engagement (P = .02), yet these individuals also reported diminished perceived competency and treatment activation, while more African-Americans had lower health literacy levels. **Conclusions:** Although this small sample yielded few statistically significant results in adherence or potential contributing factors, lower ethnic minority scores on several measures is troubling. As only half of respondents demonstrated health literacy equivalent to high school or above, tailored educational materials are vital for this cohort. The complex role of multiple patient and health delivery characteristics that bolster self-care behavior offers a promising pathway for better hospital transition interventions. Besides other available information including administrative utilization data and follow-up calls, further analyses will explore interaction effects illuminating unique areas for culturally sensitive, innovative implementations.

Keywords: Medication Adherence; Ethnic Disparities; Hospital Transition

doi:10.3121/cmr.2013.1176.ps3-50

PS3-51:

Variation in the Self-Care Behaviors of Healthcare Personnel: Physicians, Nurses, and Others

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Background/Aims: The personal self-care and health habits of healthcare personnel may influence patients' own health-related behaviors including smoking, physical activity, weight management, and alcohol consumption. This study describes the degree to which healthcare providers adhere to recommended health-enhancing behaviors, and whether adherence differs by occupation. **Methods:** A prospective cohort of healthcare personnel was enrolled in fall 2010 from two large health care organizations: Scott & White Healthcare, and Kaiser Permanente Northwest. Participants were physicians, nurses, and other healthcare personnel providing direct patient care and working full time. Potential participants were invited to take part in a study of "respiratory illness and healthcare workers." Participation was voluntary. The study tool was a self-administered internet-based questionnaire which participants completed at home or on facility computers. The questionnaire included items on demographic information, occupational factors, and health-related behaviors. Upon completion of the enrollment questionnaire, participants received a small incentive in the form of cash or gift card. **Results:** Data are presented for 1701 participants who completed the enrollment survey. Participants were grouped in three occupational categories: Physicians (n = 175), Nurses (n = 484), and Other Providers (n = 404). Significant differences emerged in demographic characteristics, with physicians being younger, more likely to be male, married, having a higher median household income, and higher level of education (P <0.001). In terms of body mass index (BMI) physicians were more likely to report a normal weight (55%), and were the least likely group to be obese (10%; P <0.001). By contrast, nurses and other healthcare providers were evenly distributed along three BMI categories (normal weight, overweight, obese). Physicians were more likely to report engaging in exercise at least once per week (85%) than the other two occupational categories (74%; $p < 0.005$). Approximately 5% of nurses and nearly 10% of other healthcare providers reported smoking, compared to less than 1% of physicians (P <0.001). No differences were found in the self-report alcohol consumption by occupational category. **Conclusions:** Results suggest the need to target healthcare personnel in health promotion interventions, particularly those focused on weight management and physical activity.

Keywords: Health Behaviors; Healthcare Workers

doi:10.3121/cmr.2013.1176.ps3-51