Association between Metabolic Syndrome and Human Papillomavirus (HPV) Infection

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Introduction
Human Papillomavirus (HPV)-associated cancers include cervical, penile, vulvar, anus and oropharyngeal cancer; however, host and virulence factors that lead to persistent infection versus clearance of the HPV remain largely unknown. The metabolic syndrome (MetS) is a cluster of risk factors for cardiovascular disease and diabetes having hyper-insulinemia as the underlying characteristic and has been associated with increased risk of various cancer types. Thus, we hypothesize that men and women with metabolic syndrome may have a compromised immunological response to HPV resulting in increased acquisition and viral persistence.

Materials and Methods
A cross-sectional study using data from the U.S. National Health and Nutrition Examination Survey between 1999-2010 was conducted. Analyses: The weighted chi-squared was used to test the association between HPV and MetS in the entire cohort.

Results
6043 individuals were included in analysis. HPV prevalence was 26.1%, and MetS prevalence was 29%. Adjusted for age, ethnicity, HIV status, number of sexual partners, and marital status, we found increased HPV infection risk among men with the MetS, RR 1.33 (95% CI 1.02 to 1.41). Among women, the result was not statistically significant RR 1.08 (95%CI 0.93 to 1.26). Compared to non-Hispanic whites, black males had higher risk of HPV infection in the presence of MetS 1.48 (95%CI 1.2 to 1.83). Compared to nonsmokers, current smokers were at increased risk of HPV infection in the presence of MetS, RR = 1.2 (95%CI 1.02 to 1.41).

Conclusion
In this U.S. surveyed population, we found association between MetS and HPV infection risk among males.

Myths about Autism on YouTube: Implications on Patient Care

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Introduction
YouTube is a global social network that enables users to communicate by posting video clips, comments, messages, images, etc. It receives millions of page views every day and has over a billion users [1]. YouTube surpasses any cable network in the United States in viewers aged 18 to 49 years old [2]. This social media platform can be the first source of information for patients, causing potential repercussions in how they perceive and act towards specific medical conditions. Myths about Autism are often discussed, accurately or inaccurately, in YouTube clips. In this study, clips indexed as Autism myths were evaluated for scientific content and matched with myths often reported in the scientific literature.

Materials and Methods
In this cross-sectional study, clips were selected by searching videos on YouTube using the keywords “Autism” and “Myths.” Of the 97,100 clips identified, the first 50 were selected for analysis. Clips were evaluated for general information (views, subscribers, etc.) and the inclusion, scientific relevance and depth of information on 7 of the most common myths reported in the scientific literature.

Results
The 50 clips reviewed had a mean of ~98,000 views (range: 429 to 4 million) with a mean of ~540,000 subscribers. Evaluation of myths indicated that at least 40% were produced in an attempt to provide didactic content. At least one clip contained vaguely explained myths with unsubstantiated and/or false information (see Table 1)

Conclusion
Previous studies have reported that patients use social media for healthcare purposes, including improving their knowledge about treatment [3-6]. YouTube is one of the primary online destinations for millions of youth worldwide, as a source of both information and entertainment, and is a major activity in the lives of parents. Social media influences personal health decision making [7] and provides an opportunity for clinicians and health educators to prepare effective health education models.

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