A Novel Study of Premature Sudden Death

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The annual incidence of Sudden Cardiac Death (SCD) is between 180,000 to 250,000 in the United States population. Sudden Unexpected Death (SUD) may account for 10% of all natural deaths. Sudden death – unexpected, non-traumatic, natural death that occurs in free-living individuals ages 18-65 – encompasses both SCD and SUD cases, without the same timely exclusion criteria. Our research group has previously been using a data-set of sudden death in Wake County; here referred to as SUDDEN Pilot. SUDDEN Pilot limited cases to those with EMS referrals, resulting in the under-reporting of sudden death cases. Since previous methods are extensive and exclusive, new methods are needed to accurately determine sudden death risk factors and mortality. This new data-set, SUDDEN Rebuild, aims to improve upon the methods of our previous data-set. SUDDEN Rebuild utilizes an automated electronic pre-screening and a screening phase of case adjudication conducted by graduate and undergraduate research interns. Cases were excluded based on age, place of death, cause of death, and toxicology reports. Despite the more efficient methods, demographic data remains consistent between SUDDEN Rebuild and SUDDEN Pilot. However, further study is necessary to understand the under-counting of Hispanic deaths.

References

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