

Social determinants of health

The social determinants of health are the economic and social conditions that influence individual and group differences in [health status](#).

They are the health promoting factors found in one's living and working conditions (such as the distribution of income, wealth, influence, and power), rather than individual risk factors (such as behavioral risk factors or genetics) that influence the risk for a disease, or vulnerability to disease or injury. The distributions of social determinants are often shaped by public policies that reflect prevailing political ideologies of the area.

The World Health Organization says, "This unequal distribution of health-damaging experiences is not in any sense a 'natural' phenomenon but is the result of a toxic combination of poor social policies, unfair economic arrangements [where the already well-off and healthy become even richer and the poor who are already more likely to be ill become even poorer], and bad politics."

The objective of Rethorn et al. was to analyze the collective effect of social determinants of [health](#) (SDoH) on [lumbar spine surgery](#) outcomes utilizing two different [statistical methods](#) of combining variables.

This [observational study](#) analyzed data from the [Quality Outcomes Database](#), a nationwide United States spine registry. Race/ethnicity, educational attainment, employment status, insurance payer, and gender were predictors of interest. They built two models to assess the collective influence of SDoH on outcomes following lumbar spine surgery—a stepwise model using each number of SDoH conditions present (0 of 5, 1 of 5, 2 of 5, etc) and a clustered subgroup model. [Logistic regression](#) analyses adjusted for age, [multimorbidity](#), surgical indication, type of lumbar spine surgery, and surgical approach were performed to identify the [odds](#) of failing to demonstrate clinically meaningful improvements in disability, [back pain](#), leg pain, [quality of life](#), and patient satisfaction at 3- and 12-months following lumbar spine surgery.

Stepwise modeling outperformed individual SDoH when 4 of 5 SDoH were present. [Cluster](#) modeling revealed 4 distinct subgroups. Disparities between the younger, minority, lower socioeconomic status and the younger, white, higher socioeconomic status subgroups were substantially wider compared to individual SDoH.

Collective and cluster modeling of SDoH better predicted failure to demonstrate clinically meaningful improvements than individual SDoH in this cohort. Viewing social factors in aggregate rather than individually may offer more precise estimates of the impact of SDoH on outcomes ¹⁾.

The economic status of a glioma patient's community may influence survival. Future efforts should investigate potential mechanisms such as health care access, stress, treatment adherence, and social support ²⁾.

Following focal resective epilepsy surgery there was a significant increase in the education level,

financial income and employment at 4 years' postoperative follow-up³⁾.

Sociodemographic factors of travel distance, insurance, and race influenced time to epilepsy surgery for children with focal cortical dysplasia. Further research is warranted to target barriers in access to subspecialty care and develop ways to identify earlier the patients who may benefit from evaluation and deployment of surgical intervention⁴⁾.

References

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