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LITERATURE REVIEW

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Outdoor Cooling as an Adaptive Strategy to Minimize the Heat Wave-Induced Mental Health Outcomes

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Dear Editor,

In current era, a number of systematic and empirical studies have reported the adverse impact of heat waves on mental health. However, the range of heat waves induced adverse outcomes is still ambiguous. Various mitigation strategies are being employed to overcome the health outcomes of heat waves.⁽¹⁾ This short summary is also elaborating about its mitigation by considering outdoor cooling as an effective and adaptive strategy to reduce the crucial impact of heat wave on mental health. The thermal discomfort and health risk of societies are mainly experienced due to involvement in labor works, industries, and agricultural activities.⁽²⁾ The outer environment can be prevented from heat wave outcomes by modification of pavement structure via albedo adjustment. The albedo adjustment can cause variations in solar energy reflection. A study has reported that heat waves induced temperature fluctuation up to 4°C can be stabilized by albedo constructions such as pavements and rooftops in urban areas.⁽³⁻⁵⁾ In addition, the concept of blue-green spaces is also becoming popular in current era to reduce urban heat waves induced mental outcomes.⁽³⁾ The trees with wide trunks and crowns should be grown to cancel out heat waves induced mental health outcomes.⁽⁶⁾ A study conducted in China has also mentioned that shading from trees, umbrellas and buildings has cooling effect in sunny days.⁽⁷⁾ Furthermore, a study from Italy Rome reported cooling effect of taller buildings in surrounding areas as compared to small buildings in streets.⁽⁸⁾

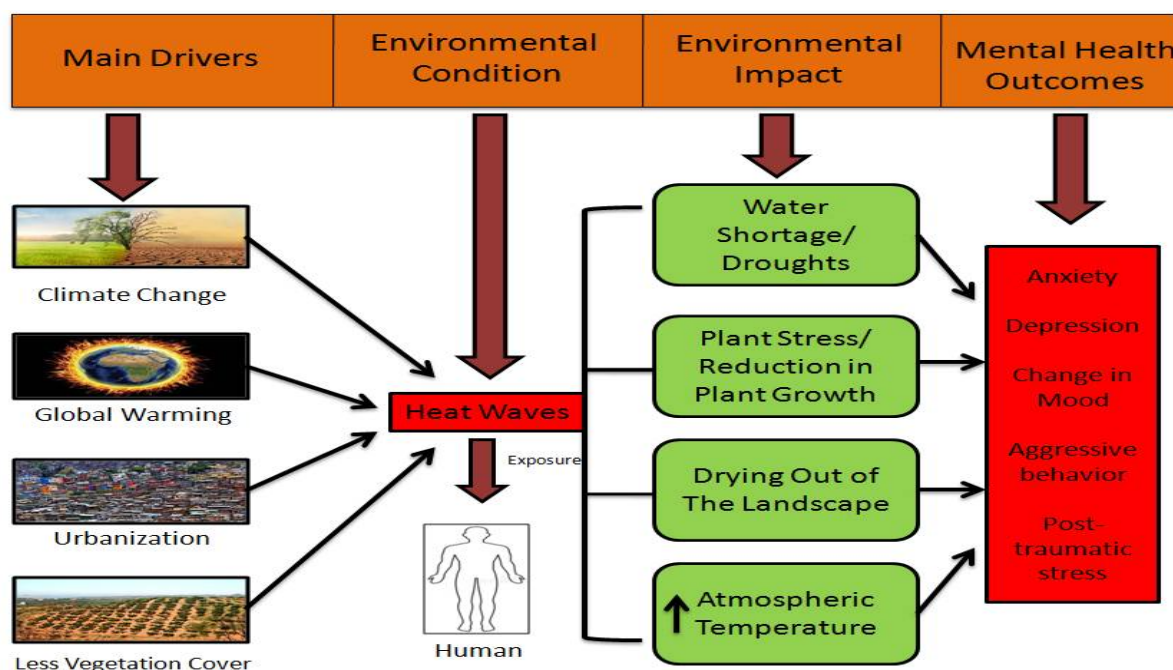


Figure 1. Elaborating the impact of heat waves on human mental health condition

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Conflict of interest

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