A3.2: Response to Migration Stress in Migrant Farmworkers during Pre-Migration

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Abstract:
Introduction: Working in 42 states, 3 to 5 million migrant farm workers experience significant health disparities and high levels of stress during migration. Research has failed to explore migration stress in nonmigrating migrant farmworkers (NMMFWs). Purpose: To explore migration stress and markers of stress (salivary cortisol [sC]) and health (Blood Pressure [BP], Waist Circumference [WC]) in NMMFWs.

Method(s): Design: This descriptive exploratory pilot study was guided by an integrative biopsychosocial stress model. Methods: A convenience sample of 40 NMMFWs provided 5 serial (awakening, T1; 30 minutes later; T2; before lunch, T3; before dinner, T4; and bedtime, T5) saliva samples in 24 hours. Other measures included BP, WC, BMI and self-reported migration stress. Participants were middle-aged (M = 39 years), immigrant (80%), married (72%), women (65%) of Mexican origin (100%).

Results: Migration stress scores were high (M = 79.8), with work subscale scores significantly correlated with T2 sC (r = .43, p =<.01). At T2 sCs were negatively associated with WC (r = -.55, p =<.01), while at T5 sC was significantly correlated with systolic (r = .75, p < .001) and diastolic (r = .76, p <.001) BP. Diurnal patterns (T1, M = 9.645 nmol/l to T2, M = 12.63 nmol/l), rose and declined to nadir (T5, M = 1.87 nmol/l). Women exhibited higher sC awakening response (CAR) than men (M = 10.73 nmol/l, 8.00 nmol/l respectively) and lower nadirs at T5 (M = 1.40 nmol/l, 3.02 nmol/l, respectively). Repeated measures ANOVA showed significant main effects (F = 43.90, [df 2.35, 72.65], p =<.01) for migration stress and significant interaction effects (F = 4.01, [df 2.18, 72.65], p =<.05) between migration stress (high, low) and sC. A low stress group had lower CARs than a high stress group (14%, 30% respectively). Cross-sectional design, limited sample size, and limited diurnal patterns were limitations.
**Discussion & Conclusions:** Women more than men may have greater stress during pre migration. Low migration stress may reflect blunting (CAR, diurnal profile) similar to chronic stress. High sC response at T1 could be early exhaustion at T5. Further exploration of stress is necessary in NMMFWs.

**Abstract History:**
This abstract has not been presented or accepted for presentation in whole or in part at the SNRS or other scientific meeting.

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