Stigma, Social Experience, and Psychological Wellbeing in Emerging Adults with Chronic Health Conditions
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BACKGROUND
Chronic health conditions (CHCs; e.g., heart disease, lung disease, diabetes) are present in over 50% of the adult population, and are associated with:
- Limitations on daily living activities
- Increased rates of depression, anxiety, suicidal ideation, and risk of death by suicide
- Negative social experiences (e.g., increased loneliness, decreased social connection and perceived social support)
- Greater experiences of discrimination and stigma

Social determinants of health (SDOH; e.g., social connection, social support) are non-medical social needs that exert substantial influence on a person’s health outcomes and QOL.

Stigma is experienced in higher rates in CHCs:
- Influences healthcare access/utilization
- Anticipation of stigma in healthcare provider interactions are associated with:
  - Stress/physical distress
  - Openness/reporting of health information
  - Healthcare satisfaction
  - Social experience

Social experience is central to individuals’ health outcomes (e.g., physical/mental health and QOL):
- Loneliness (lack of meaningful connection/absence of prosocial experiences) is increased in CHCs and poses negative consequences for health:
  - Risk of early mortality
  - Heightened by internalized stigma, it contributes to self-devaluation
  - Associated with poor health-behaviors (e.g., substance abuse, poor sleep hygiene, reduced physical activity, poor eating habits)

Social Connection and Social Support:
- Alleviates stress via receiving advice/encouragement, and increases QOL
- Increases care access for overall wellbeing
- Combats social isolation

Aims. To increase understanding of the relationships between stigma, social experience, and QOL as measured via loneliness, social connection, perceived social support, and various dimensions of psychological wellbeing in college students with CHCs.

Research Hypotheses.
- Health-stigma will be positively associated with loneliness and negatively associated with social connection and perceived social support.
- Health-stigma will be negatively associated with dimensions of psychological wellbeing examined in this study (see measurement).
- Dimensions of psychological wellbeing will be positively associated with loneliness and negatively associated with social connection and perceived social support.

PARTICIPANTS & PROCEDURES
Undergraduate and graduate students (N = 107) between the ages of 18 to 35 attending a large Midwestern university completed a series of online self-report surveys assessing physical health, health-stigma, social experience, and psychological wellbeing.

MEASUREMENT

| Physical health-stigma - Neuro-Quality of Life Scale (NRQOL) for overall, enacted, and internalized stigma |
| Loneliness - Revised UCLA Loneliness Scale Version 3 (UCLA-R V3) |
| Social connectedness - Social Connectedness Scale-Revised (SCS-R) |
| Social support - Multidimensional Scale of Perceived Social Support for perceived overall, significant others, family, and friends support (MSPSS) |
| Psychological wellbeing - Psychological Well-being Scales (PWS) for autonomy, environmental mastery, personal growth, positive relations with others, and self-acceptance |

RESULTS

<table>
<thead>
<tr>
<th>Health-Stigma &amp; Social Experience</th>
<th>Overall</th>
<th>Enacted</th>
<th>Internalized</th>
</tr>
</thead>
<tbody>
<tr>
<td>Loneliness</td>
<td>0.253**</td>
<td>0.256**</td>
<td>0.201*</td>
</tr>
<tr>
<td>Social Connectedness</td>
<td>-0.323***</td>
<td>-0.316***</td>
<td>-0.283***</td>
</tr>
<tr>
<td>Overall Perceived Social Support</td>
<td>-0.279**</td>
<td>-0.259**</td>
<td>-0.249**</td>
</tr>
<tr>
<td>Significant Others Support</td>
<td>-0.206*</td>
<td>-0.197*</td>
<td>-0.192*</td>
</tr>
<tr>
<td>Family Support</td>
<td>-0.244**</td>
<td>-0.248**</td>
<td>-0.208*</td>
</tr>
<tr>
<td>Friends Support</td>
<td>-0.168*</td>
<td>-0.139*</td>
<td>-0.167*</td>
</tr>
</tbody>
</table>

LEGEND.
* = p < 0.05  ** = p < 0.01  *** = p < 0.001

DISCUSSION

Conclusions.
Greater health-related stigma was associated with increased likelihood of students with CHCs reporting:
- Higher loneliness, suggesting that as individuals’ experience of health-stigma increases, their experience of loneliness is likely to increase.
- Lower social connection and perceived social support, suggesting that as health-stigma increases the experience of social connection and perceived social support is likely to decrease.
- Poorer psychological wellbeing across all dimensions examined in this study, suggesting that as individuals’ experience of health stigma increases, their psychological wellbeing is likely to decrease.

Higher levels of loneliness were associated with an increased likelihood of students with CHCs reporting poorer psychological wellbeing across all dimensions examined in this study, suggesting that as loneliness increases, their psychological wellbeing is likely to decrease.

Greater Social connection and social support from others across all dimensions including overall perceived social support as well as significant others, family, and friends were associated with an increased likelihood of students with CHCs reporting greater psychological wellbeing, suggesting that as social connection and social support becomes greater, their psychological wellbeing is likely to become greater.

Limitations & Strengths.
The limitations of this study includes cross-sectional nature, use of self-report surveys, small sample size, potential environmental effects from factors related to the COVID-19 pandemic during data collection (e.g., social distancing), and college student population sample

The strengths of this study includes self-report data, online implementation, selection of study variables, and significance of its research questions

Significance/Implications.
- Informs intervention targets specifically tailored to individuals with CHCs
- Helps raise healthcare providers awareness
- Understanding adversity due to COVID-19

Future Directions.
- SDOH factors impacts on overall wellbeing longitudinally in individuals with CHCs, including in samples that are not comprised solely college students
- Converging methods leveraging other forms of data outside of self-report within larger sample sizes.