

Research Summary Methodology

INTRODUCTION

The Sex, Gender and Cannabis Hub is a three-year research and knowledge translation project led by the Centre of Excellence for Women's Health and funded by Health Canada. Its purpose is to collect and analyze evidence on sex and gender related factors affecting cannabis use, prevention and treatment. Activities include ongoing academic and grey literature reviews, three Communities of Inquiries with practitioners, and secondary analyses of survey data. The results of these activities are translated into research summaries, bulletins and other knowledge products and posted on the [Sex, Gender, and Cannabis Hub](#) for a wide audience.

SEX, GENDER AND SEX AND GENDER BASED ANALYSIS+ (SGBA+)

Sex and gender science is important in all health research and is critical to fully understanding cannabis use [1, 2]. Examining all components of sex and gender and measuring, analyzing and reporting them increases the precision of prevention, research and treatment [3]. It is necessary to apply a sex and gender based plus analysis (SGBA+) to all evidence regarding cannabis to determine how it may or may not take into account sex and gender. Both sex (anatomy, physiology, genetics, hormones etc.) and gender (norms, roles, identities and institutional gender) affect the impact and use of cannabis [4, 5]. SGBA+ is also applied to policies, programs or communications to assess how they differentially affect men, women, boys, girls and gender-diverse individuals, and how they intersect with characteristics such as race, age, ability, income and sexual orientation, among other factors.

RESEARCH SUMMARIES

We are deriving Research Summaries from literature searches and scoping reviews, as one component of the Sex, Gender and Cannabis Hub. The Research Summaries reflect current information on sex, gender, and equity related factors affecting patterns or use, health effects and prevention, treatment and harm reduction.

SEARCH STRATEGY

These Research Summaries build on findings from our previous work related to sex, gender, and cannabis based on searches of literature from 2007 – 2017 (for methods see Hemsing and Greaves, 2020 [4]) and updates informing the [2019 Sex, Gender and Cannabis Report](#) [6], by integrating academic literature published since 2018.

An additional search was conducted in September 2020 in the following electronic databases: Medline, PsycINFO, CINAHL and Embase using keywords identified below. The search produced $n = 2,003$ unique returns. A supplemental search in February 2021 produced an additional $n = 239$ unique returns. Ongoing searches will be performed in July 2021 and January and July 2022.

SELECTION CRITERIA

Studies are included if they reported on primary research published between 2018 and 2022, in the English language, and from any of the following countries: Australia, Austria, Belgium, Canada, Denmark, Finland, France, Germany, Greece, Iceland, Italy, Luxembourg, the Netherlands, New Zealand, Norway, Portugal, South Africa, Spain, Sweden, Switzerland, the United Kingdom, and the United States of America. Studies are included if: cannabis was the primary substance; sex and gender considerations were reported and there was a research focus on: 1) prevalence, 2) patterns of use, 3) routes of administration, 4) harm reduction, 5) health promotion, 6) prevention and brief interventions, 7) treatment, or 8) pregnancy and reproductive health. Qualitative, quantitative, and mixed methods study designs including randomized controlled trials, case-control, interrupted time series, cohort, cross-sectional and qualitative studies are included. Systematic reviews and meta-analyses are excluded and will be cross-referenced for eligible studies.

DATA SELECTION & EXTRACTION

Title, abstract, and full paper screening is conducted using online systematic review tools. Several researchers participate in bi-weekly meetings and independently with a third reviewer to discuss the inclusion or exclusion of articles and to resolve discrepancies by discussion and consensus. Data are extracted from papers using the following categories: aim of study, study type, population, main findings, inclusion of sex and gender based analysis plus (SGBA+). Authors individually extract data for included papers. Of the articles identified by January 2021, we extracted data from $n = 556$ papers.

SEARCH TERMS

Medline/Embase

1. "gender transformative".ti,ab.
2. ("gender informed" or "gender integrated" or "gender responsive").ti,ab.
3. ("sex informed" or "sex integrated" or "sex responsive").ti,ab.
4. ("gender equalit*" or "gender equit*" or "gender inequalit*" or "gender inequit*").ti,ab.
5. ("sex equalit*" or "sex equit*" or "sex inequalit*" or "sex inequit*").ti,ab.
6. ("gender related" or "gender difference*" or "gender disparit*" or "gender determinant*" or "gender specific").ti,ab.
7. ("sex related" or "sex difference*" or "sex disparit*").ti,ab.
8. "gender comparison*".ti,ab.
9. "sex comparison*".ti,ab.
10. "compar* gender*".ti,ab.
11. "compar* sex*".ti,ab.
12. "gender based".ti,ab.
13. "sex based".ti,ab.
14. ("gender divers*" or "gender minorit*").ti,ab.
15. "gender analys*".ti,ab.
16. "sex analys*".ti,ab.
17. (transgender* or "trans gender*" or LGBTQ or LGBTQ or LGBT or LGB or lesbian* or gay or bisexual* or queer*).ti,ab.

18. ("transsexual*" or "trans sexual*").ti,ab.
19. 17 or 18
20. ("non binar*" or nonbinar*).ti,ab.
21. homosex*.ti,ab.
22. ("woman focussed" or "woman focussed" or "girl focused" or "girl focussed" or "woman centred" or "girl centred" or "woman centered" or "girl centered" or "female focused" or "female focussed" or "female centred" or "female centered").ti,ab.
23. ("man focused" or "man focussed" or "boy focused" or "boy focussed" or "man centred" or "boy centred" or "man centered" or "boy centered" or "male focused" or "male focussed" or "male centred" or "male centered").ti,ab.
24. Transgender Persons/
25. Sexual Minorities/
26. Transsexualism/
27. Bisexuality/
28. exp Homosexuality/
29. Gender Identity/
30. (bigender* or "bi gender*").ti,ab.
31. ("gender identit*" or "gender incongru*").ti,ab.
32. "differently gendered".ti,ab.
33. (woman or man or women or men or girl or boy or girls or boys or trans or transgender or transgendered or female or male or sex or gender).ti.
34. Pregnant Women/
35. Pregnancy/
36. ((pregnant or expect* or childbearing) adj1 (mother? or wom?n)).mp.
37. Peripartum Period/
38. Postpartum Period/
39. Breast Feeding/
40. (perinatal or antenatal or postpartum or post-partum or breastfeed* or "breast feed*" or "breast fed").mp
41. or/1-40
42. Marijuana Abuse/
43. Cannabis/
44. Marijuana Smoking/
45. exp Cannabinoids/
46. (marijuana or marihuana or hashish or ganja or bhang or hemp or cannabis or cannabinoid* or cannabidiol or tetrahydrocannabinol).ti,ab.
47. 42 or 43 or 44 or 45 or 46
48. Harm Reduction/
49. ("harm reduction" or "reducing harm" or "reducing harmful" or "harm minimization" or "minimizing harm" or "minimizing harmful" or "harm minimisation" or "minimising harm" or "minimising harmful").ti,ab.
50. exp Risk Reduction Behavior/
51. ("risk reduction" or "reducing risk" or "reducing risks" or "risk minimization" or "minimizing risk" or "minimizing risks" or "risk minimisation" or "minimising risk" or "minimising risks").ti,ab.
52. or/48-51 [HARM REDUCTION]
53. exp Health Promotion/
54. ("health promotion" or "promoting health" or "promoting healthy" or "promoting wellness" or "patient education" or "consumer education" or "client education" or outreach or "wellness program" or "wellness programs" or "wellness programme" or "wellness programmes").ti,ab.
55. 53 or 54 [HEALTH PROMOTION]
56. Preventive Health Services/
57. Consumer Health Information/ or Health Literacy/
58. Secondary Prevention/
59. (prevention or "preventive health" or "preventive healthcare").ti,ab.
60. (prevention or preventive).ti,ab.

61. or/56–60 [PREVENTION focussed]
62. Psychotherapy, brief/
63. Motivational interviewing/
64. (brief intervention; motivational interviewing; motivational enhancement; SBIRT).ti, ab
65. Residential Treatment/
66. (Residential treatment or outpatient treatment).ti, ab
67. (intervention*, treatment* or treating or therapy or therapies or drug therapy or pharmacotherapy or pharmacology or cessation or "addiction treatment").ti,ab
68. 62 or 63 or 64 or 65 or 66 or 67
69. exp psychotherapy/
70. (psychotherap\$ or psychoso\$).ab,ti
71. exp behavior therapy/
72. (behaviour adj2 therap\$).ab,ti
73. (behav\$ adj2 management).ab,ti.
74. (cognitive\$ adj2 therap\$).ab,ti.
75. exp Counseling/
76. counsel\$.ab,ti.
77. (marijuana anonymous or twelve step or land based therapy or culture based therapy).ab,ti.
78. 69 or 70 or 71 or 72 or 73 or 74 or 75 or 76 or 77
79. 47 or 52 or 55 or 61 or 68 or 78
80. 41 and 47 and 79
81. limit 80 to yr="2018 - 2020"

REFERENCES

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2. Greaves, L., *Missing in Action: Sex and Gender in Substance Use Research*. *International Journal of Environmental Research and Public Health*, 2020. **17**(7).
3. Greaves, L. and N. Hemsing, *Sex and Gender Interactions on the Use and Impact of Recreational Cannabis*. *International Journal of Environmental Research and Public Health*, 2020. **17**(2).
4. Hemsing, N. and L. Greaves, *Gender Norms, Roles and Relations and Cannabis-Use Patterns: A Scoping Review*. *International Journal of Environmental Research and Public Health*, 2020. **17**(3): p. 947.
5. Brabete, A.C., et al., *Sex- and Gender-Based Analysis in Cannabis Treatment Outcomes: A Systematic Review*. *International Journal of Environmental Research and Public Health*, 2020. **17**(3): p. 872.
6. Greaves, L., et al., *Sex, Gender and Cannabis*. 2019. p. Available at: <https://bccewh.bc.ca/2019/11/sex-gender-and-cannabis/>, 94 pages.