Abstract

Background

The study aims to assess the demographic characteristics, patterns of cannabis cultivation, use of cannabis and other drugs, and market participation of cannabis growers in Georgia.

Methods

We conducted an online survey of Georgian cannabis growers. The International Cannabis Cultivation Questionnaire (ICCQ 2) measured cultivation practices, and data were analysed using descriptive statistics.

Results

Out of 218 participants, the vast majority were males with a median age of 29 years. They grew a mean of 2.5 cannabis plants in the past year and grew it both in- and out-doors. 89% reported growing cannabis for their personal use, among them 68% grew for recreational use and 32% grew it for medical use. Growers shared one-third of their cannabis, with little sold for profit. Despite high perceived legal risks, few faced legal issues, and involvement in other illegal activities was minimal. 54% reported using chemical fertilizers, yet believe their cannabis is free of adulterants.

Conclusion

Georgian cannabis growers resemble those in the Global North, primarily cultivating for personal use and not engaging in other illegal activities, except that they are the least likely to grow cannabis commercially. Additionally, they use chemicals extensively, yet often believe this does not compromise the purity of the final product.

Keywords: cannabis growers, online survey, Georgia (country)

Background

Georgia, an Eastern European country with an upper-middle-income economy, has joined the global discourse on cannabis cultivation by becoming part of the Global Cannabis Cultivation Research Consortium (GCCRC) in 2021. This short report is the first to examine small-scale cannabis growers in Georgia, focusing on their demographics, cultivation, motivations, drug use, market involvement, and criminal justice interactions.

In 2018, Georgia's parliament decriminalized cannabis possession and use of up to 5 grams, but restricted distribution, sale, and public consumption. Possessing over 5 grams can result in criminal penalties, while growing up to 151 grams avoids imprisonment but may lead to fines or community service (Parliament of Georgia, 2024). Local stakeholders describe the policy environment as "quasi-legalization" or "legalization of recreational use" (Nadareishvili et al., 2024). We use the term "liberalization" to prevent confusion and inconsistencies in legal interpretations. Past-year cannabis use is 5% in the general population, lower than the European average (8%) (Kirtadze, 2022; EUDA, 2024). A recent study found no change in cannabis use rates among young adults before and after policy liberalization (Nadareishvili et al., 2024). Large-scale commercial cultivation is banned in Georgia, but the Ministry of Internal Affairs (MIA) confiscated 3,017 kg of cannabis in 2022 (NDO, 2023). Home cultivation has become a major source of cannabis acquisition for people who use it, with a post-liberalization survey showing 43% of regular users obtaining cannabis this way, a 7 percentage-point (20%) increase from the pre-liberalization period (Mgebrishvili et al., 2020).

Despite shifting toward cannabis liberalization, Georgia's legal framework remains in a grey area, affecting both cultivation practices and social perceptions of cannabis use. The lack of legal access to regulated medical cannabis and the absence of a formalized industry related to medicinal cannabis production mean that cultivation practices in Georgia are likely to be more informal and decentralized compared to the rest of the GCCRC countries. Without regulated medical cannabis, individuals rely on traditional cultivation and distribution methods, which differ greatly from the regulated, industrial-scale production in legal markets. The illicit cannabis market in Georgia is well-established. Despite a significant increase in cannabis confiscations by the MIA (NDO, 2023), surveys show easier access to cannabis, with a growing proportion of young adults reporting the ability to obtain it (Nadareishvili et al., 2024).

We expected home-cultivation practices in Georgia to differ from the rest of the GCCRC countries, due to differing legal, geopolitical, and socio-economic contexts.

Methodology

Design

We conducted an online cross-sectional survey of Georgian cannabis growers in 2021, using the ICCQ 2 developed by the GCCRC. Detailed information on ICCQ 2, including mandatory and optional modules for Georgia, is provided in another paper (Mgebrishvili et al., 2025).

Subjects and sampling

Promotional activities have been described in detail elsewhere (Mgebrishvili et al., 2025). Participants were given a detailed study description, including safety, ethics, and contact information, as part of the informed consent process. Eligibility was assessed with three questions at the start of the questionnaire. Digital consent was obtained from all respondents, and no identifiable personal information was collected (Mgebrishvili et al., 2025).

Statistical analysis

Descriptive statistics were used to outline sample characteristics, behaviours, and perceptions. Categorical or ordinal responses are shown as percentages, while mean, median and standard deviation are provided for continuous variables. For cannabis use and frequency questions, analysis was limited to participants who reported using cannabis. Data were analysed with SPSS 26.

Results

Participants' characteristics

We analysed data from 218 Georgian cannabis growers, part of a larger sample of 11,479 across 18 countries. Participants reported that they found out about the survey through sponsored ads on Facebook/Twitter (71%; 150), growers' online closed forums or social media groups (21%; 45), cannabis associations (In Georgia, without formal cannabis associations, respondents likely refer to informal networks) (19%; 41), friends/acquaintances (13%; 27) (multiple-response option question). Table 1 presents the basic socio-demographic characteristics of the survey respondents. The median age of participants was 29 (SD=9), with 94% (202) being male. The majority had a university degree (66%, 113), and almost half were employed full time (49%, 80). Median yearly income was 4,404 USD (about 14,093 GEL) (SD 5,423.74). Employed participants earned a median of 5,138 USD (15,516.76 GEL), while unemployed participants earned a median of 3,089 USD (9,328.78 GEL).

[Table 1]

Cannabis and other drug use

Almost all participants reported using at least one psychoactive substance besides cannabis, mainly tobacco and alcohol. Just over a third (38%; 72) reported consuming illicit substances (other than cannabis) in the past year (Table 2). Current cannabis use (at least once in the past month) was reported by 89% (189). Among current cannabis users who answered the question, more than half (58%; 88) reported consuming it on a daily or almost daily (20–30 days per month) basis. Growers who used cannabis for medical purposes were more likely to consume it on a daily or almost daily basis (61%; 31 vs. 57%; 57). Among participants who answered the question about consuming self-produced cannabis - regardless of whether they used it for medical or recreational purposes - the majority reported using only self-produced cannabis (38%; 49) followed by only not self-produced (35%; 45), and both (27%; 35) in the past 12 months.

[Table 2]

Growing experience and patterns

The average age of first cannabis cultivation was 21.6 years (range: 11-45), and the average age of first use was 16.8 years (range: 10-28). The average number of cannabis plants ever grown was 20.0 (range: 0-101), and the average grown in the past 12 months was 2.5 (range: 0-11). Use of any chemicals was reported by 54% (115) of respondents. The most popular strains grown by the respondents were hybrids (67%; 121) and indica (64%; 115). The most common response to “where do you grow cannabis” was both indoors and outdoors (43%; 90).

Reasons/purpose for growing

When asked about their reasons for growing cannabis (Table 3), with the option to select multiple responses, most participants reported doing so for personal consumption. Specifically, 82% (176) grew cannabis for recreational use and 39% (83) grew it for medical use (these groups overlap, with 56 participants – 26% of the overall sample – reporting growing for both personal medical and personal recreational purposes). Very few reported growing cannabis to sell to others, whether to earn profit or to cover the cost of cannabis or other drug use (3%; 6). A total of 66% (142) of participants enjoyed growing cannabis, 51% (110) admired its beauty, 39% (83) found it healthier, 31% (67) noted it was cheaper, and 26% (56) believed it was free of adulterants.

[Table 3]

Market participation

In the past year, a mean of 66% (ranges: 0-100) of personally used cannabis was covered by respondents' own cultivation. On average, 49% of the cannabis they grew last year was consumed personally, while 17% was kept for later use. Additionally, 31% was given away or shared, and 2% was swapped. Very little of the cannabis grown by respondents was sold in the past year. On average, less than 1% of their self-grown cannabis was sold, either to cover growing costs, or for profit.

[Table 4]

Contact with police and other illegal activities

The perceived risk of being caught for growing cannabis was high, with 21% (33) rating it as very high and 28% (45) as high (Table 5). However, only 10% (18) had encountered police for cannabis growing. Most participants (65%; 108) had never been convicted, and 93% (152) had not engaged in illegal activity (excluding cannabis-related) in the past 12 months. Only 14 (8%) reported being convicted for multiple offenses.

[Table 5]

Discussion

This first survey of Georgian cannabis growers found that participants, mostly young males, grew cannabis for personal or shared use and consumed it daily. In our study, cannabis cultivation was mainly driven by the desire to supply oneself and friends for personal use. Only a few participants grew cannabis to sell. Our findings align with studies from New Zealand and Israel, which highlight personal use and sharing as key drivers (Wilkins et al., 2018). The parent study also confirmed that supply for non-commercial purposes (e.g., sharing and gifting) was relatively common in other GCCRC countries, with Georgian growers being the least likely to be motivated by commercial factors. Similar to Georgian participants, more than half of the growers in all countries, except Israel, reported sharing or giving away some of the cannabis they produced. Selling cannabis was most common among growers in Finland (36%), New Zealand (34%), and Switzerland (30%), while it was least common in Georgia (3%), the UK (12%), Denmark (12%), and Canada (13%) (Søgaard et al., 2024).

Across different regions, home cultivation emerges as a strategy to bypass illegal markets, reduce costs, and ensure product quality (Potter et al., 2015). Non-monetary incentives, like enjoyment of cultivation and sharing, play a key role in motivating small-scale growers (Pardal, 2018). Of significance is the inherent incentive among individuals cultivating cannabis for personal use to prioritize safety (Belackova et al., 2019). The majority of cannabis growers engage in some form of non-commercial supply, which involves the distribution of small quantities of cannabis within semi-private networks (Belackova & Vaccaro, 2013). The significance of non-commercial supply of cannabis in the Georgian context was emphasized in our prior research (Mgebrishvili et al., 2020). Another unique aspect of Georgian growers compared to other GCCRC countries is that Georgia leads in fertilizer use (Lenton et al., 2024), although, as our findings show, many growers mistakenly believe their cannabis is free of adulterants.

Despite nearly half perceiving a high risk of police apprehension, only 10% reported police encounters, similar to the ICCQ 1 survey (Potter et al., 2015; Wilkins et al., 2018). In the ICCQ survey, 21% perceived a "high" or "very high" risk, similar to the Georgian sample. Over two-thirds had never been convicted, and 7% reported engaging in illegal activities (excluding cannabis) in the past year. This suggests that most individuals involved in cannabis cultivation in Georgia generally do not engage in activities that pose a threat to public safety. The gap between perceived police risk and actual experience may reflect outdated views, as focus on small-scale users has decreased, with charges dropping from 6,922 in 2019 to 2,622 in 2022 (NDO, 2023).

Our findings show that cannabis cultivation in Georgia reflects trends in Western Europe, North America, and Australasia, suggesting a global shift toward small-scale, non-commercial cultivation. An important difference is that Georgian growers are the least likely to grow cannabis for commercial purposes among other GCCRC countries. Additionally, while there has been a significant reduction in the use of fertilizers in some GCCRC countries since 2012, Georgia has the highest proportion of chemical fertilizer use.

Limitations

Study had limitations, including a non-random online sample that may not fully represent Georgia's cannabis growers. The sample likely biased results toward smaller-scale growers less concerned about legal consequences and demographic groups with greater internet usage, higher education, and urban populations. Notably, 92% of the general population has internet access. While 38% of the population lives in rural areas (Geostat, 2024), rural participants made up only 8% of our sample. Although cannabis use is legal in

private spaces in Georgia, the low disclosure of cannabis sales may stem from severe penalties for illicit selling.

Conclusions

Our study sheds light on the socio-demographics, cultivation practices, and cannabis use among people who participated in the survey. Most are young, employed males growing cannabis for personal use. Despite perceiving high police risk, actual encounters are rare, and most have no convictions beyond cannabis-related offenses. Georgian growers are the least likely to cultivate cannabis for commercial purposes. They nevertheless use chemicals extensively, often unaware of their impact.

Data statement

Due to the sensitive nature of the questions asked in this study, survey respondents were assured raw data would remain confidential and would not be shared.

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