History, science, and politics of **international cannabis scheduling**, 2015–2021

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History, science, and politics of **international cannabis scheduling**, 2015–2021

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On 21 April 2021, the herbal medicines "cannabis" and "cannabis resin" definitively ceased to appear in Schedule IV of the 1961 Single Convention on narcotic drugs (C61), where they had been listed since the entry into force of that treaty in 1964. The process to scientifically review and reschedule *Cannabis*-related controlled drugs had been launched by the World Health Organization (WHO) on 2 December 2016 and went through a number of hindrances until it finally got submitted to a unique voting process on 2 December 2020 at the United Nations Commission on narcotic drugs (CND).

This report reviews the scientific assessments of *Cannabis*-related controlled drugs and cannabidiol (CBD) by the WHO's Expert Committee on Drug Dependence (ECDD) and subsequent political discussions at CND that culminated with the 2 December 2020 vote, changing the scheduling of "cannabis" and "cannabis resin" under the C61. A digest of the four years of proceedings (2015-2021) is presented, showcasing elements that provide an understanding about the length and complexity of the processes involved. The report introduces previously-unpublished minutes, complements of information, details on stakeholders and their role, and highlights a number of bureaucratic and diplomatic issues; it compares the efforts undertaken by WHO and CND in terms of method, transparency, and involvement (or not) of interested parties, beyond governments.

For a detailed account of the processes preceding the period reviewed in this report (1952–2018), please refer to the Crimson Digest, vol. 1 (Riboulet-Zemouli et al, 2018).

1. INTRODUCTION

Cannabis L., an herbaceous plant used in medicine for centuries (Bridgeman and Abazia, 2017; Crocq, 2020; Fankhauser, 2008; Mikuriya, 1969; Pisanti and Bifulco, 2018; Spence, 2020; Zlas *et al.*, 1993), became subject of international law in 1925 amidst a still relatively new international legal order that was to "shape, and be shaped by, the drugs issue" (McAllister, 2000, p.44; p.44). In February of that year, in Geneva, as the Second Opium Conference closed, the *Cannabis* plant appeared in the "International Convention relating to Dangerous Drugs" (Collins, 2020; Kendell, 2003; McAllister, 2000, p.44; "The cannabis problem," 1962); the topic had only been discussed during the First Opium Conference of 1912 in the Hague (Mills, p.152–155). A few months later, in Septembre 1925 in Brussels, the medicinal products of the plant (the dried top parts of the plant, its resin or extract, and its tincture) appeared within the Second "International Agreement [...] on the Unification of Pharmacopoeial Formulas for Potent Drugs" (Riboulet-Zemouli, 2020b; "Seconde conférence…", 1925) after, cannabis medicines has similarly only been briefly considered in 1905 for the First Agreement (Riboulet-Zemouli, 2020b, pp.13–14).

The dichotomy between a "dangerous" drug requiring controls over its chain of supply (as mandated by the 1925 Geneva Convention) and a "potent" drug requiring standardization via pharmacopoeial harmonization (as per the 1925 Brussels Agreement) persisted until the adoption of the 1961 Single Convention on narcotic drugs (C61) in March 1961 in New-York. This later treaty, superseding all previous international instruments related to *Cannabis* (Lande, 1968; Mills, 2016), placed the

plant under specific controls roughly following the Geneva Convention (Collins, 2020) but, more importantly, it diverted from the Brussels Agreement by listing for the first time the medicinal products of *Cannabis* within the Schedule of drugs "that are particularly liable to abuse and to produce ill-effects, and do not have therapeutic advantages that offset these effects" (WHO, 2019a, p.37): Schedule IV. This opened a parenthesis in the history of medicine where *Cannabis* L. and its therapeutic derivatives "dwindled to practically nothing" (Mikuriya, 1969, p.38) on pharmacy shelves and in scientific research agendas (Bewley-Taylor and Jelsma, 2011; Crocq, 2020; Fankhauser, 2008, pp.10–11; Multidisciplinary Association..., 2020; Nutt, 2019; Nutt *et al.*, 2013).

The placement of "cannabis and cannabis resin" in Schedule IV of the C61, which was inconsistent with the history of uses of the plant in indigenous and Western therapeutics, and ignored the science, was reversed on 21 January 2021, with the entry into force of Decision 63/17 (CND, 2020, p.5; 2021c; entry into force that became definitive in 21 April, ninety days after the reception of the notification [UNODC, 2020a, p.7; United Nations Secretariat, 2021]) of the Commission on Narcotic Drugs (CND –the "policymaking body of the United Nations with prime responsibility for drug control matters" [UNGASS, 2016, pp.3,21] and only body with the mandate to amend the 1961 Convention's schedules). Agreed upon on 2 December 2020 by a simple-majority vote of CND Member States pursuant to a scientific evidence-based recommendation by the World Health Organization (WHO –the "only treaty body with a mandate to carry out medical and scientific assessment of substances" [WHO, 2018b] and the only body able to trigger changes in scheduling at the CND, on the basis of such an assessment [WHO, 2010, pp.7–10; 2016]), the withdrawal of "cannabis and cannabis resin" from Schedule IV of the C61 and previous *cannabis scheduling discussions* have given rise to unprecedented procedural complexities, delays, and has been characterized by a certain amount of drama, and a disruptive pandemic.

On 2 December 2020, four years to the day after WHO announced the launch of the *Cannabis* review procedure (CND, 2016a, p.8; WHO, 2016c, pp.7–8), the CND accepted one out of nine of the *Cannabis*-related recommendations; one did not call for a vote, three were rejected, and another four were not put on the ballot (Tables 1 and 2; CND, 2020, pp.5–7; CNDmonitor, 2020). Although only one of WHO's proposals was accepted, it represents a landmark for *Cannabis* in (and as a) medicine. It is also an important incremental step towards the much needed "scientific evidence-based review and scheduling of the most prevalent, persistent and harmful substances" called for by the international community (UNGASS, 2016, p.15; see also Ghehiouèche and Riboulet-Zemouli, 2016; Riboulet-Zemouli and Ghehiouèche, 2016; WHO, 2016a, p.9).

This report documents, relates, and reflects on this process. The authors participated in the UN and WHO processes, whenever possible personally attended meetings, collected data and evidence from all aspects of the proceedings (whether publicly accessible or not) and interacted with a broad range of stakeholders involved at different levels, between 2015 and 2021.

Table 1. Overview of the WHO ECDD's cannabis-related recommendations and outcome of the 2 December 2020 votes at the CND.

Not subject to a vote | Subject to a vote, but not submitted to votation | Subject to a vote: accepted | Subject to a vote: rejected

WHO ECDD recommendation	Issue date(s)	Action taken by the CND	Action reflected in CND report
Recommendation of the 40th ECDD meeting. Preparations considered to be pure cannabidiol (CBD) should not be scheduled within the international drug control conventions	*WHO ECDD meetings:* - Pre-review: 6–10 Nov. 2017[a] - Critical review: 4–7 June 2018[b] *WHO Director-General communication:* 23 July 2018[c]	**Vote was not required**[g]	*idem.*
Recommendation No. 5.1. of the 41st ECDD meeting. Delete cannabis and cannabis resin from Schedule IV of the 1961 Single Convention	*WHO ECDD meetings:* - Pre-reviews: 4–7 June 2018[b] - Critical reviews: 12–16 Nov. 2018[d] *WHO Director-General communication:* 24 January 2019[e] *WHO Director-General corrections:* 5 August 2020[f]	**Approved** 27 yes, 25 no, 1 abstention. Decision 63/17[h]	*idem.*
Recommendation No. 5.2.1. of the 41st ECDD meeting. Add **delta-9-THC** to Schedule I of the 1961 Single Convention		**Rejected** 23 yes, 28 no, 2 abstentions Decision 63/18[h]	*idem.*
Recommendation No. 5.2.2. of the 41st ECDD meeting. If 5.2.1 is adopted, delete **delta-9-THC** from Schedule II of the 1971 Convention		**Not submitted to a vote** As per the special procedure adopted in CND Decision 63/16[i]	*idem.*
Recommendation No. 5.3.1. of the 41st ECDD meeting. If 5.2.2 is adopted, add **other isomers of THC** to Schedule I of the 1961 Single Convention		**Not submitted to a vote** As per the special procedure adopted in Decision 63/16[i]	*idem.*
Recommendation No. 5.3.2. of the 41st ECDD meeting. If 5.3.1 is adopted, delete **other isomers of THC** from Schedule I of the 1971 Convention		**Not submitted to a vote** As per the special procedure adopted in Decision 63/16[i]	*idem.*

Continued on the next page.

Table 1. *Continued*

WHO ECDD recommendation	Issue date(s)	Action taken by the CND	Action reflected in CND report
Recommendation No. 5.4. of the 41st ECDD meeting. Delete **extracts and tinctures of cannabis** from Schedule I of the 1961 Single Convention	*WHO ECDD meetings:* - Pre-reviews: 4–7 June 2018[b] - Critical reviews: 12–16 Nov. 2018[d] *WHO Director-General communication:* 24 January 2019[e] *WHO Director-General corrections:* 5 August 2020[f]	**Rejected** 24 yes, 27 no, 2 abstentions. Decision 63/19[j]	*idem.*
Recommendation No. 5.5. of the 41st ECDD meeting. Give effect to the recommendation of the 40th ECDD meeting [...] by adding a footnote to the entry for cannabis and cannabis resin in Schedule I of the 1961 Single Convention to read "Preparations containing predominantly CBD and not more than 0.2 per cent of delta-9-THC are not under international control"		**Rejected** 6 yes, 43 no, 4 abstentions. Decision 63/20[j]	*idem.*
Recommendation No. 5.6. of the 41st ECDD meeting. Add preparations containing delta-9-THC* to Schedule III of the 1961 Single Convention. ** produced either by chemical synthesis or as preparations of cannabis, that are compounded as pharmaceutical preparations with one or more other ingredients and in such a way that delta-9-THC cannot be recovered by readily available means or in a yield which would constitute a risk to public health*		**Not submitted to a vote on 2 December** As per the special procedure adopted in Decision 63/16[i]	**Rejected by consensus** As expressed in Decision 63/21[k]

Acronyms. CBD: cannabidiol; CND: Commission on narcotic drugs of the United Nations; delta-9-THC: delta-9-tetrahydrocannabinol; ECDD: Expert Committee on Drug Dependence; WHO: World Health Organization.
Notes. [a]WHO, 2018c, [b]2018d; [c]Adhanom Ghebreyesus, 2018; [d]WHO, 2019a; [e]Adhanom Ghebreyesus, 2019; [f]CND, 2020c, pp.11–12; [g]CND, 2019a, p.3; [h]CND, 2020b, p.5, [i]pp. 3–4, [j]p.6, [k]p.7.

Table 2. Full results of the 2 December 2020 CND votes on WHO ECDD's cannabis-related recommendations submitted to a vote.

Voting country	Recommendation 5.1	Recommendation 5.2.1	Recommendation 5.4	Recommendation 5.5
Afghanistan	No	Yes	No	No
Algeria	No	No	No	No
Angola	No	No	No	No
Australia	Yes	Yes	Yes	Yes
Austria	Yes	Yes	Yes	No
Bahrain	No	No	No	No
Belgium	Yes	Yes	Yes	No
Brazil	No	No	No	No
Burkina Faso	No	No	No	No
Canada	Yes	No	Yes	Yes
Chile	No	No	Yes	No
China (Popular Republic of)	No	No	No	No
Colombia	Yes	Yes	Yes	No
Côte d'Ivoire	No	No	No	No
Croatia	Yes	Yes	Yes	No
Cuba	No	No	No	No
Czech Republic	Yes	Yes	Yes	No
Ecuador	Yes	Yes	Yes	Yes
Egypt	No	No	No	No
El Salvador	Yes	No	Yes	No
France	Yes	Yes	Yes	No
Germany	Yes	Yes	Yes	No
Hungary	No	Yes	No	No
India	Yes	No	No	No
Iraq	No	No	No	No
Italy	Yes	Yes	Yes	No
Jamaica	Yes	Yes	No	No
Japan	No	No	No	No
Kazakhstan	No	No	No	No
Kenya	No	No	No	No
Kyrgyzstan	No	No	No	No
Libya	No	No	No	No
Mexico	Yes	No	Yes	No
Morocco	Yes	Yes	Yes	Abstention
Nepal	Yes	Abstention	Abstention	Abstention
Netherlands	Yes	Yes	Yes	No
Nigeria	No	No	No	No
Pakistan	No	No	No	Abstention
Peru	No	Yes	No	Yes
Poland	Yes	Yes	Yes	No
Russian federation	No	No	No	No
South Africa	Yes	Yes	Yes	Yes
Spain	Yes	Yes	Yes	No
Sweden	Yes	Yes	Yes	No
Switzerland	Yes	Yes	Yes	No
Thailand	Yes	Yes	No	Yes
Togo	No	No	No	No
Turkey	No	No	No	No
Turkmenistan	No	No	No	No
Ukraine	Abstention	Abstention	Abstention	Abstention
United Kingdom	Yes	Yes	Yes	No
Uruguay	Yes	No	Yes	No
United States of America	Yes	No	Yes	No

2. CONTEXT AND SIGNIFICANCE OF THE ACCEPTED RECOMMENDATION

The international law régime currently in force for *Cannabis*-related controlled drugs (CCDs) is the one established by the C61 with the placement of "cannabis" (dried tops, known in traditional pharmacopeias as *ganja*, *marijuana* or *dagga*) and "cannabis resin" (oleoresinous exudate from the plant's glandular trichomes, also called *charas* or *hashish*) in Schedule I and IV, and of "extracts and tinctures of cannabis" (galenic preparations of the former) in Schedule I (Collins, 2020; Curran *et al.*, 2016). In 1971, the placement of all the isomers of tetrahydrocannabinol (THC) in Schedule I of the Convention on psychotropic substances of 1971 (C71) completed the legal panorama of CCDs. However, this status changed with CND Decision 2(XXXIV) of April 1991 that lowered the isomer delta-9 of tetrahydrocannabinol (delta-9-THC) from C71's Schedule I to the less-requiring Schedule II (CND, 1991) following WHO's evidence-based recommendations (Riboulet-Zemouli et al, 2018, pp.40–41; WHO, 2018d, p.39). Although that Decision applies to both delta-9-THC obtained in laboratory and pure delta-9-THC isolated from the *Cannabis* plant (the Conventions do not distinguish between synthetic and plant-derived obtentions of a scheduled drug), it has no practical effect for botanical *Cannabis* medicines which remained under unchanged controls as per the C61.

WHO's *Cannabis*-related recommendations issued in 2018 (Adhanom Ghebreyesus, 2018) and 2019 (Adhanom Ghebreyesus, 2019; CND, 2020c, pp.11–12) as well as the scientific evidence-based and methodology-reliant reviews that enabled them (Mayor, 2019; WHO, 2018d; 2019a, pp.34–55) were historically unprecedented (Curran *et al.*., 2016; Danenberg *et al.*, 2013; Riboulet-Zemouli et al, 2018) since herbal CCDs had never been submitted to such formal review, contrary to what treaties mandate (Danenberg *et al.*, 2013; WHO, 2010; 2016a). A number of stakeholders, including the United Nations Committee on Economic, Social, and Cultural Rights (2020, p.13), emphasized that the placement of "cannabis and cannabis resin" in C61's Schedule IV in 1961 had not been substantiated in any sort of scientific assessment. Observers (Clarke, 2018; Curran *et al.*, 2016; Krawitz *et al.,* 2018, pp.9–10; Mills, 2016, pp.100–101; Multidisciplinary Association…, 2020; Riboulet-Zemouli et al, 2018, pp.36–37) had also pointed out that WHO's 1954 recommendation that "there should be efforts towards the abolition of cannabis from all legitimate medical practice" (WHO, 1955; see also FAAAT, 2019; Riboulet-Zemouli et al, 2018), reiterated throughout the 1950s, relied on "personal views, experiences or anecdotes" (Danenberg *et al.*, 2013, p.180) and included more biased sources (such as reports from the South African Apartheid régime's police, [Clarke, 2018; WHO, 1955, pp.12–13]) than medical data, at the same time that they lacked any methodology. Although the idea to ban *Cannabis* from the realm of therapeutics had long been driven by some Member States and parts of the UN, the impetus initially came from the office of United Nations Secretary-General Trygve Lie (ECOSOC, 1951; Lande, 1968; Mills, 2016), its incorporation into the C61 was made credible by, and justified through, the repeated WHO recommendations of the 1950s.

Recommendation 5.1 can be interpreted as a *de facto* repeal of the 1950s position. If before 2019, WHO's Expert opinion of "medical cannabis" was that there should be efforts towards its abolition from all legitimate medical practice, then it should now be inferred, at the very least, that efforts towards its abolition should cease, and instead, should go towards the reintroduction of *Cannabis* in all legitimate medical practice.

2.1. AN UPGRADED REVIEW PROCESS

On 2 December 2016, when WHO finally launched the data collection process to scientifically assess CCDs (CND, 2016a, p.8; WHO, 2016c, pp.7–8) both methodology and quality of work in relation with the review of substances for international control and recommendation mechanism had evolved (WHO, 2010) at a level almost diametrically opposed to that of the 1950s' meetings and subsequent reports drawn up *on the back of an envelope* –although not immune to future improvements (Danenberg *et al.*, 2013; Hallam *et al.*, 2014). As WHO (2020) explains on its website:

> These recommendations are the outcome of a multi-year review process conducted by the Expert Committee on Drug Dependence (ECDD), an independent scientific advisory body to the WHO. Based on scientific assessment, potential health risk and therapeutic benefit, the ECDD recommends the appropriate scheduling of psychoactive substances within the international drug conventions.

Of particular historical significance, the assessments are reinforced in their singularity by the fact that an entire ECDD meeting (that included three new Experts, nationals of Chile, Japan, and Thailand; see Annex I), was set up in June 2018 and dedicated solely to *Cannabis* and its products (see WHO, 2018d) and upgraded data collection and analysis were used (WHO, 2018c, pp.10–11).

In the last decades, CCDs had been addressed on several occasions at ECDD meetings as a minor, non-review agenda item (Ghehiouèche and Riboulet-Zemouli, 2016; Riboulet-Zemouli et al, 2018, pp.42–43). Yet, with time passing, the need for a sound assessment became pressing as contemporary evidence accumulated (O'Grady, 2020; Pisanti and Bifulco, 2017; 2018; WHO, 2018c; 2018d). Official requests for WHO to initiate the ECDD review process accumulated during the last decade (Krawitz and Riboulet-Zemouli, 2019, p.4; Ghehiouèche and Riboulet-Zemouli, 2016) with a first binding request (WHO, 2010, pp.10–13) received in 2007 for delta-9-THC (CND Resolution 50/2, see: UNODC, 2019, pp.4,17) followed by a total of six requests to review "cannabis and cannabis resin": from CND in 2009 (CND Resolution 52/5, see: CND, 2009; WHO, 2016d, p.32), the INCB in 2014 (INCB, 2014, pp.93–94), the ECDD itself in 2015 (WHO, 2016d, p.32), from the Czech republic in 2016 at the 69th World Health Assembly (WHO, 2016b, p.248), the International Association for Hospice and Palliative Care in 2016 (Ghehiouèche and Riboulet-Zemouli, 2016), and finally the Caribbean Community in 2018 (Antoine and Douglas, 2018). The official assessment process began with the issuance of a request for proposals "for contributions to the authorship of Pre-Review reports on cannabis-related substances" (United Nations Global Marketplace, 2017; WHO, 2016e), hiring of a dedicated technical officer, and establishment of a questionnaire to collect data from Member States (WHO, 2018e). WHO (2020) synthetizes the process that followed:

> "Formal reviews were conducted during the 39th, 40th, and 41st ECDD sessions and considered both the best available scientific evidence and data from Member States provided through the annual WHO ECDD Member State questionnaire. In addition, Member States, members of the public, civil society groups, pharmaceutical industry representatives, and other relevant groups were also able to comment on the ECDD assessments and recommendations through Open Sessions at all ECDD meetings."

The open sessions that preceded the ECDD meetings facilitated the participation of a broad range of stakeholders: patients, physicians, pharmaceutical industry representatives, and researchers (WHO, 2017; 2018a; 2019a, pp.2–3). Open sessions started being reflected in ECDD reports at the 40th meeting. During the open session of the 41st meeting, a Brazilian human rights activist focused her intervention on a one-minute recording of shooting resulting directly, she commented, from a "war on drugs" to which drug scheduling is not unrelated, inviting the Experts to balance the harms of substances under review with *unintended negative consequences* of drug control. Ahead of the 40th meeting, a joint contribution of a hundred civil society organizations (Krawitz *et al.*, 2018) pointed out bias and inconsistencies in the

initial Pre-review reports (see: Arnold, 2018a; 2018b; 2018c; 2018d; Cannazza and Citti, 2018a; 2018b; 2018c; 2018d; Hill *et al.*, 2018a; 2018b; 2018c; 2018d; Rehm *et al.*, 2018a; 2018b; 2018c; 2018d; Wiley, 2018a; 2018b; 2018c; 2018d), that were acknowledged during the meeting and almost entirely addressed in the revisited Critical-review reports prepared for the 41st meeting (Poovendran and De Zwart, 2018a; 2018b; 2018c; 2018d). Ahead of the meetings, the Experts had recalled "that unpublished data, although considered low-quality evidence, can be informative during the meeting proceedings" (WHO, 2018c, pp.10–11), a crucial element since the knowledge of traditional medicinal plants is sometimes maintained orally. WHO claims to have incorporated "Scientific published and unpublished data, hundreds of publications reviewed and referenced" in addition to "Member States' data, UNODC and INCB Early Warning Advisory System," as well as the European Monitoring Centre for Drugs and Drug Addiction, Uppsala Monitoring Centre on adverse medicines reactions, and Global Surveillance and Monitoring System on Substandard and Falsified Medicines (Forte, 2019). The two-year ECDD review process was taken advantage of to gather the utmost number of opinions, information, and science in a satisfactory, gender and geographically-balanced, independent manner. The composition of the ECDD (see Annex I) did not give rise to criticism; only the author of the Pre-review pharmacology report received scrutiny and criticism.

2.2. DID W.H.O. GO FAR ENOUGH?

ECDD recommendations received different ratings among observers. Some qualified as a "political decision" (Drugreporter, 2020) the fact that the ECDD did not recommend moving "cannabis and cannabis resin" out of Schedule I, mentioning a "very questionable rationale" (Smith, 2020). The ECDD indeed "did not consider that cannabis is associated with the same level of risk to health as that posed by most of the other drugs placed in Schedule I" (WHO, 2019a, p.41) suggesting that maintaining CCDs in Schedule I is not supported by science.

Yet, beyond progress made in strengthening the place of science in the Conventions' scheduling assessment mechanisms, the ECDD remains captive of the treaty provisions framing its work (Danenberg *et al.*, 2013; WHO, 2010). C61's Article 2(6) states that "in addition to the measures of control applicable to all drugs in Schedule I, [...] cannabis [is subject to the provisions of] article 28." This Article *de facto* submits CCDs to the régimes of both Schedule I and Article 28. Removing CCDs from Schedule I (possible under Article setting the rules for changes in the scheduling of substances) would likely be left without effect, as Article 2(6) which attaches CCDs (as well as "coca leaf" and "opium") to a Schedule I régime regardless of eventual action taken by the CND pursuant to Article 3, would have superseded it. Reconciling a removal from Schedule I with Article 2(6) seems to require a prior amendment of said Article. The opportunity and relevance of an ECDD recommendation to move CCDs to Schedule II or out of the Schedules are therefore questionable in light of these treaty constraints.

On top of that, the treaties' criteria for substance scheduling, under which the ECDD has to frame its reviews, are all but scientifically sound and base the addition of new drugs to the Schedules on their similarity to CCDs (Danenberg *et al.*, 2013; Hallam *et al.*, 2014; Lohman and Barrett, 2020; Riboulet-Zemouli et al, 2018, pp.18–19). By moving CCDs out of Schedule I what would the consequences be for substances placed in Schedule I as per their similarity with "cannabis"? This context suggests that, far from *not going far enough*, the ECDD, conscious of its mandate and limitations, went *as far as it could go*.

2.3. DID W.H.O. GO TOO FAR?

Conversely, throughout 2019 and 2020, a number of Member States repeatedly shared fears that WHO's recommendations were going too far, feeling that they could be "viewed as a shift and support for legalization of the recreational use of cannabis" (see "Nigeria" in CNDmonitor, 2020; and CND, 2020d, pp.2,5–6). A few days after the vote, on 5 December 2020, the Ambassador of the Russian Federation in Vienna tweeted his concerns that "'#UN News' misinterpreted the decision of #CND and claimed that #cannabis is no longer considered to be a risky drug. This assertion doesn't correspond to reality" (Ulyanov, 2020). The title of the alluded UN News press release was subsequently edited from "UN commission reclassifies cannabis, no longer considered risky narcotic" (Archive.org, 2020a) to "UN commission reclassifies cannabis, yet still considered harmful" (Archive.org, 2020b) as were other parts of the text such as the deletion of the qualificative "long-heralded" in reference to *Cannabis*' "medicinal properties."

While the perceptions of the decision among the general public might need to be scrutinized, pedagogy and explanations of the decision could represent a better asset to avoid misconceptions and confusion, than *blue-penciling*. Explaining the scope of Decision 63/17 involves underscoring that the entire scheduling process is tailored to evaluate the best régime of international control to regulate substances for medical and scientific purposes (UN, 1973, pp.49–51; Rexed *et al.*, 1984). The Schedule in which a substance is placed only determines the legal régime to be applied to its medical and scientific purposes: separate legal dispositions prevail for industrial use (a "purpose other than medical and scientific ones"; C61, Article 2(9)), and the Conventions call to combat the purpose of "drug abuse" regardless of the Schedule in which the drug being abused is placed (UN, 1973, pp.110–114,402–403). Hence, changes in the scheduling status of a drug primarily affect the subset of regulations to be applied to the medical and scientific uses of that drug: prescription requirements, dispensation parameters, licensing of pharmacists and producers, etc. (detailed in Rexed *et al.*, 1984, pp.33–50; see also UNODC, 2020b, pp.8–13), not to its *recreational* uses. Member States were aware of this, as the representative of Nigeria at the CND declared (Permanent mission of Nigeria..., 2020):

> "We are not under any illusion that the Recommendations are a receipt for legalization of cannabis, but we understand how the perception of our actions may influence public attitude to non-medical use of cannabis and related substances."

By emphasizing issues related to the non-medical and recreational uses of *Cannabis*, that were not addressed by the recommendations, the CND partly diverted the discussions away from the topics of health, access to medicines, and appropriate regulatory and control frameworks that the recommendations called for.

3. CONTEXT AND SIGNIFICANCE OF THE REJECTED RECOMMENDATION(S)

The WHO Experts' recommendations not only recommended withdrawing "cannabis and cannabis resin" from Schedule IV, in line with the evidence. The ECDD also presented a series of recommendations for further changes in the scope of control of the different CCDs under both C61 and C71 (Table 1), with a two-fold objective: "reflect the emerging therapeutic role of cannabis-based medicines whilst continuing to prevent diversion, misuse, and other public health-related harms that may arise from cannabis use" (WHO, 2020). Had all recommendations been adopted, the scheduling status of CCDs would have been dramatically simplified: recommendations 5.2 and 5.3 would have placed all CCDs in the same Schedule, in one single Convention –instead of the three schedules in two Conventions (see Table 3). Recommendation 5.4 would have deleted unnecessarily redundant and complex terminology, without affecting controls. Recommendations 5.5 and 5.6 would have eased Member States' options in facilitating access to some medicines of their convenience, with different tiers for delta-9-THC or CBD-dominant CCDs.

Table 3. Comparison of the international scheduling status of cannabis-related controlled drugs before and after the 1991 and 2021 changes, with the WHO's recommended changes.*

Until 1991	1991-2021	After 21 April 2021	If all of WHO's recommendations had been accepted
Régimes of control according to Schedule placement, Single Convention on narcotic drugs of 1961			
Schedule I and Schedule IV	**Schedule I and Schedule IV**	**Schedule I and Schedule IV**	**Schedule I and Schedule IV**
cannabis, cannabis resin	cannabis, cannabis resin	–	–
Schedule I	**Schedule I**	**Schedule I**	**Schedule I**
extracts and tinctures of cannabis	extracts and tinctures of cannabis	cannabis, cannabis resin, extracts and tinctures of cannabis	cannabis, cannabis resin, extracts and tinctures of cannabis, and all THC isomers
Schedule II	**Schedule II**	**Schedule II**	**Schedule II**
–	–	–	–
Schedule I and Schedule III	**Schedule I and Schedule III**	**Schedule I and Schedule III**	**Schedule I and Schedule III**
–	–	–	Preparations containing delta-9-THC (produced either by chemical synthesis or as preparations of cannabis) that are compounded as pharmaceutical preparations with one or more other ingredients and in such a way that delta-9-THC cannot be recovered by readily available means or in a yield which would constitute a risk to public health

Continued on the next page.

Table 3. *Continued*

Until 1991	1991-2021	After 21 April 2021	If all of WHO's recommendations had been accepted
Schedules, Convention on psychotropic substances of 1971			
Schedule I	**Schedule I**	**Schedule I**	**Schedule I**
delta-6a(10a)-THC delta-6a(7)-THC delta-7-THC delta-8-THC delta-9-THC delta-10-THC delta-9(11)-THC	delta-6a(10a)-THC delta-6a(7)-THC delta-7-THC delta-8-THC delta-10-THC delta-9(11)-THC	delta-6a(10a)-THC delta-6a(7)-THC delta-7-THC delta-8-THC delta-10-THC delta-9(11)-THC	–
Schedule II	**Schedule II**	**Schedule II**	**Schedule II**
–	<u>delta-9-THC</u>	delta-9-THC	–
Schedule III	**Schedule III**	**Schedule III**	**Schedule III**
–	–	–	–
Schedule IV	**Schedule IV**	**Schedule IV**	**Schedule IV**
–	–	–	–
Not in the Schedules of neither the Single Convention on narcotic drugs of 1961 nor the Convention on psychotropic substances of 1971			
cannabidiol, cannabinol, cannabigerol, and many other phytocannabinoids; terpenes, terpenoids and phenols; chlorophyll; other phytoconstituents of the *Cannabis* plant	cannabidiol, cannabinol, cannabigerol, and many other phytocannabinoids; terpenes, terpenoids and phenols; chlorophyll; other phytoconstituents of the *Cannabis* plant	cannabidiol, cannabinol, cannabigerol, and many other phytocannabinoids; terpenes, terpenoids and phenols; chlorophyll; other phytoconstituents of the *Cannabis* plant	cannabidiol, cannabinol, cannabigerol, and many other phytocannabinoids; terpenes, terpenoids and phenols; chlorophyll; other phytoconstituents of the *Cannabis* plant <u>and preparations of delta-9-THC, of cannabis, or of cannabis resin, containing predominantly CBD, and not more than 0.2 per cent of delta-9-THC</u>

* Changes in the scope of scheduling are <u>underlined</u>

3.1. RECOMMENDATION 5.5 ON CANNABIDIOL CONTROL

WHO Director-General, Tedros Adhanom Ghebreyesus, circulated two notifications in relation to cannabidiol (CBD). The first one (recommendation of the 40th ECDD meeting, see Table 1) in July 2018 contained a strong, non-negotiable, and non-votable statement: "preparations considered to be pure CBD should not be scheduled" (Adhanom Ghebreyesus, 2018), implying that "pure CBD" was not under international control, and negating, by not recommending it, that it could be listed in the Schedules at all. The phrasing of the 2018 recommendation, however, implied that any medicine that is not "pure" CBD could still be considered under control as "cannabis resin" or "extract of cannabis," an issue with regards to the trace-amount of other cannabinoids that are often found in CBD medicines, both as residues in the extraction process and as by-products of synthesis. The

second ECDD recommendation on CBD (recommendation 5.5, see Table 1) stated the objective to "give effect" to the July 2018 recommendation that CBD *should not* be subject to the international drug control régime (Adhanom Ghebreyesus, 2019).

Complex in its technical construction, recommendation 5.5 was subject to in-depth analysis during the two years of discussion at the CND (CND, 2020f; CNDmonitor, 2020; UNODC, 2019). Beyond the issues of what the changes recommended entailed for CBD control (Riboulet-Zemouli, 2020a; 2020c; Riboulet-Zemouli and Krawitz, 2021, pp.21–22) the discussions showed that the proposal might have had unforeseen consequences, such as "sidestepping the amendment process outlined in the treaty itself [...] reserved exclusively to Member States" (United States Mission..., 2020), which probably motivated the rejection of this recommendation more than an opposition to the idea of clarifying CBD-related control measures (see "European Union" in CNDmonitor, 2020; Riboulet-Zemouli, 2020c).

3.2. RECOMMENDATIONS 5.2, 5.3, 5.4 AND 5.6: AN ATTEMPT FOR POLICY COHERENCE & SIMPLIFICATION

Behind a formally complex appearance, the rest of WHO's ECDD cannabis-related recommendations (Adhanom Ghebreyesus, 2019; CND, 2020c, pp.11–12), none of which were accepted, constituted a well-reasoned proposal to effectively facilitate access and availability of CCDs without imposing on Member States to reform. Two recommendations (5.5 and 5.6, see Table 1) proposed to establish a simplified three-tiered control system:

- Cannabis, cannabis resin, and all the isomers of THC, would remain under a Schedule I régime,
- Governments would have been able to decide, on domestic criteria, to subject selected CCD medicines (with more than 0.2% delta-9-THC) to a Schedule III régime,
- CBD medicines (with less than 0.2% delta-9-THC) would be clearly placed outside of the scope of international control, similarly to "pure CBD."

To achieve these goals, the ECDD recommended to remove delta-9-THC from Schedule II of C71 (recommendations 5.2.1) and remove other THC isomers from Schedule I of C71 (recommandation 5.3.1) while adding all THC isomers to Schedule I of C61 (recommendations 5.2.2 and 5.3.2). While this would have *de facto* increased the measures of control applied to delta-9-THC medicines (*e.g.*, Marinol®, Syndros®), had all recommendations been adopted by the CND, countries where these medicines are marketed would have had the possibility to consider such medicines under a C61 Schedule III régime, equivalent to the C71 Schedule II régime for preparations (Rexed *et al*., 1984, pp.35–37), thanks to recommendation 5.6. At the same time, recommendation 5.6 would have *evened the playing-field* between synthetic and plant-derived medicines, by allowing countries where herbal cannabis medicines are marketed (*e.g.*, Asmasol®, Ayurvedic formulations, Bediol®, Cannador®, Sativex®) to also apply a Schedule III régime. Because recommendations 5.2, 5.3, and 5.6 were not adopted, plant-derived delta-9-THC preparations continue to be subject to stricter measures of control than synthetic delta-9-THC preparations.

Another proposal, recommendation 5.4, was a purely technical correction of a terminological error present in the C61: the entry "extracts and tinctures of cannabis" corresponds to the exact same product as "preparation of cannabis" and "preparation of cannabis resin" (Riboulet-Zemouli, 2020b). The ECDD considered that, because "preparation" is defined in C61, contrary to "extracts and tinctures of cannabis" deleting the latter would improve policy coherence and simplify the interpretation of the treaty (WHO, 2019a, p.53), without affecting any control measure, since preparations are to be controlled at the same level that the drug they contain, and "extracts and tinctures" are in Schedule I, at the same

level that the drug they contain (see "INCB, *Analysis of the impact of the WHO recommendations on the control requirements of the international drug control system*" in CNDmonitor, 2020).

During the two years of discussion at the CND, WHO representatives explained that the recommendations had been thought of as a whole, and were meant to be understood, interpreted, and voted on jointly. But Member States addressed them separately (United States Bureau…, 2020; CNDmonitor, 2020) in part due to the fact that voting procedures differed depending on the CCD considered (Facsimile..., 2020, pp.3–4), revealing inconsistencies between stand-alone recommendations that had not been foreseen by the ECDD in its approach to the recommendations as an interrelated aggregate, and making difficult a broader acceptance of the recommended changes.

4. PROCEDURAL ISSUES

WHO Director-General's letter that triggered the CND voting process is dated 24 January 2019 (Adhanom Ghebreyesus, 2019; Facsimile..., 2020, p.2) less than three months ahead of the regular session of the 62nd CND in March 2019 where the recommendations contained in the letter were to be voted on. This triggered a postponement of the vote by one year (decision 62/14: CND, 2019b) and enabled the Chair of the 62nd CND, Ambassador Mirghani Abbaker Altayeb Bakhet of Sudan (Annex II), to conduct "a dialogue, including two intersessional meetings, with representatives of WHO, INCB and the United Nations Office on Drugs and Crime [UNODC] to address open questions" (UNODC, 2020b) throughout 2019, indistinctly discussing the recommendations altogether or separately (UNODC, 2019), and welcoming the participation of civil society observers.

Central to the proceedings inside the UN were the CND Chairs, seconded by Jo Dedeyne-Amann, chief of the Secretariat to the CND, part of the UNODC (2020c). The members of CND's "Extended Bureau" grouping "the Chairperson, three Vice-Chairpersons and one Rapporteur" plus "the Chairpersons of the five regional groups, the European Union and the Group of 77 and China" (UNODC, 2020d) were also key.

The decision to address the recommendations disjointly was taken in May 2020 under the insistence of Ambassador Mansoor Ahmad Khan of Pakistan, Ambassador Bakhet's successor as Chair of the 63rd CND session (CND Chair, 2020, pp.1–2; Facsimile…, 2020, p.49; UNODC, 2020d), after a second postponement of the vote was agreed on by CND in March 2020 (decision 63/14, CND, 2020a). If WHO's assessments are to be "determinative as to medical and scientific matters" (WHO, 2016a, p.2), the CND also "has broad discretionary powers to take into account economic, social, legal, administrative or other factors, but may not act arbitrarily" (UNODC, 2020a, p.6). This is what drove the second delay.

Under the chairmanship of Ambassador Khan –that made full use of its "brokerage" power (Blavoukos and Bourantonis, 2013)– only one public intersessional meeting was arranged (on 8 October 2020), however, six days of inter-governmental "topical meetings" were set up, where civil society observers were not invited (CND Chair, 2020, p.3). While the Chair had left open the possibility to invite "other relevant intergovernmental organizations with a mandate that is of particular relevance for specific recommendations [...] upon request of Member States" (CND Chair, 2020, p.3) no other entity than UNODC and the INCB participated in the topical meetings.

4.1. A LENGTHY PROCESS

If it took WHO two years to issue its recommendations, CND took two more to craft its response (Annex III). Conversely to the efforts deployed by WHO to open and improve the process, CND did not take full advantage of the two delays to discuss the subject matter, progressively restricted access to observers, and dedicated a disproportionate amount of time to finding out how the conditionality and combination of vote between recommendations could have played in different voting scenarios (an activity usually left to observers and the media). Ultimately, these discussions were not entirely successful as time and pandemic-related constraints did not play in favour of a fully consensual agreement, neither on the substance nor on the procedure.

During summer 2020, Ambassador Khan was unexpectedly moved from the Permanent Mission to the United Nations in

Vienna, to the Embassy of Pakistan in Kabul (Embassy of Pakistan…, 2021; Khan, 2020) in between two topical meetings while continuing to chair the CND. The remote chairing of the Vienna-based CND discussions on *Cannabis* scheduling from Kabul between September and December 2020, amidst the pandemic, did not help provide the stability and normality needed for such discussions.

4.2. A SUI GENERIS VOTING PROCEDURE

In late 2019, the UNODC, which manages the secretariat to the CND, issued a series of fact sheets (Facsimile..., 2020, pp.2–5) and later a booklet (UNODC, 2020a) on the regular scheduling procedures under C61 and C71. At the same time, UNODC also required the UN Office of Legal Affairs to assess whether the vote on different recommendations could be combined despite different majorities being required under C61 and C71 for scheduling changes (Facsimile..., 2020, pp.6–13). A first proposal was presented by UNODC in March (pp.14) and was subject to intense debates. On 5 October 2020, Ambassador Khan put forward a non-paper that failed to gain consensual support. A few weeks later, "at the time of the 43rd ECDD meeting, discussions were ongoing at the CND to define and agree on a voting procedure applicable [...] at the 63rd CND reconvened session" (WHO, 2021, p.6). Proposals for alternative voting procedures were submitted by Mexico (Facsimile..., 2020, pp.22–24), the Russian federation (pp.28–29), and on various occasions by Ambassador Khan (pp.15–21,30–40), before the final voting scheme was adopted in Decision 63/16 by silent procedure over the week-end (pp.41–42; CND, 2020b, pp.3–4) two days before the vote. A failure to have adopted the procedure in time could have resulted in a third postponement of the vote, desired by no party involved.

A direct result from the special voting procedures included in Decision 63/16 is a "deviation from rule 55 of the rules of procedure of the Functional Commissions of ECOSOC" (Facsimile..., 2020, p.8). While the temporary suspension of rule 55, permitting to reconsider a proposal previously rejected, is allowed under rule 78 of that same document (UN, 1983, pp.14,19) another different deviation was inserted in the final report on the reconvened 63rd CND session of December 2020 (CND, 2020b), which serves as official record. By stating, in particular, that "the Commission decided by consensus not to add preparations containing delta-9-tetrahydrocannabinol [...] to Schedule III" (Decision 63/21; see CND, 2020b, p.v,7,17; Table 1) the report contradicts the regular voting procedure established in C61 and in Rule 58 of the same ECOSOC functional commissions document (UNODC, 2020b, pp.5–7; UN, 1983, p.14) which only allows CND to accept or reject WHO recommendations by a vote. But rule 58 and the dispositions of the Conventions are not superseded by Decision 63/16: accordingly, WHO recommendation 5.6 should have been acted upon by vote, and should technically not have been "rejected by consensus." Video recordings of 2 December 2020 show indeed that CND did not actually reject recommendation 5.6 by consensus: instead, CND decided by consensus *not to vote* on this recommendation. Although the difference is crucial, it failed to be accurately reflected in the CND report.

Decision 63/16 and the CND session's report state that the "voting procedure [...] does not set a precedent for any future decision-making" (CND 2020b, p.23), yet, it calls into question the work of the Commission as well as highlight flaws in its reporting procedure.

4.3. CND REPORT: THE DISCONNECT

Previous CND reports had already called attention due to their failure to depict the contents of the debates held during the sessions. The report on the reconvened 59th CND session of December 2016 (CND, 2016b, pp.14–15) made no mention of the announcement by WHO of the launch of the *Cannabis* review process, and of a special ECDD meeting to be held "within the next eighteen months" (WHO, 2016c, p.8). Reports also inconsistently reflect Extended Bureau meetings.

The report on the reconvened 63rd session fails to reflect the explanations of votes (CND, 2020b; 2020h). The report on the 64rd CND session held in April 2021 (a few months after the vote) again misrepresented the discussion, mentioning only that "it was underlined that Commission decision 63/17 did not legitimize the wider use of cannabis, in particular its use for recreational purposes" (CND, 2021b, p.6), as indeed some countries expressed. Surprisingly, however, no other mention of the topic appears in the report, although its outcome was extensively discussed by Member States during the session, including a number of comments exposing national advances in the reform of medical cannabis laws (Secretaría Nacional, 2021; South African Embassy…, 2021b) and a dozen countries positively recalled the vote during the opening segment and general debate (UNODC, 2021). Jamaica noted the "landmark decision on the rescheduling of cannabis (Permanent Mission of Jamaica…, 2021), South Africa "welcome[d] the decision to delete cannabis and cannabis resin from schedule IV of the 1961 convention" (South African Embassy…, 2021a) just like New Zealand (New Zealand Embassy…, 2021) which also explained how they "see this as an important step in the acknowledgment of the medical and therapeutic properties of cannabis, and in encouraging global research." France "saluted" the December 2020 vote in its statement (Mission interministérielle…, 2021), similarly to Uruguay (Permanent Mission of Uruguay…, 2021) and Australia adding that the changes in the scope of control over cannabis "demonstrated the enduring relevance of the international drug control regime, which aims to protect public health and ensure the well-being of society" (Australian Embassy…, 2021).

None of this is reflected in the 64th CND's report (CND, 2021a; 2021b), which mentions Decision 63/17 only once and refers to it in relation to "the wider use of cannabis," without making any mention to medical uses, research, and the people behind: physicians and patients.

5. CONCLUSION

Schedule IV does not oblige countries to prohibit or ban medical uses. It only strongly encourages such an exceptional legal measure, while providing it a legal umbrella. In that sense, the removal of "cannabis and cannabis resin" from Schedule IV of C61 is more a symbolic correction of the historical record (Bannister, 2021; FAAAT, 2020) and a legitimation of the potential that CCDs represent for healthcare, like many other Schedule I medications already widely prescribed and used in appropriate medical settings. But it does not trigger any direct change in the international controls applied to CCDs. Yet, the votes represent a double symbol. On the one hand, a "long-heralded medicinal plant" is, again, legitimate in medicine after a parenthesis of 57 years (since C61 entered into force in 1964). On the other hand, because WHO's eight other proposals were declined, the world is left with no other regulatory guidance for healthcare systems, physicians, pharmacists, and patients, other than those built locally and those to yet come.

By refusing ECDD's policy suggestions, the CND, instead of hampering the development of "medical cannabis programs" on the ground, might actually have perpetuated the model of *sui generis*, locally-oriented access programs, such as those initiated in the State of California in 1996 and followed by dozens of other States in the USA and other national jurisdictions. Under a Schedule IV régime, a myriad of *Cannabis* plants were legally grown and processed, traded, controlled for quality, prescribed, and used by patients –including in countries where the Supreme or Constitutional court had granted citizens the right to grow for self-medication. This was possible thanks to the modern shared approach of "respect [for] the conventions; flexible interpretation; tolerance for national policies" (Brownsfield, 2014) that stems from the Conventions (Bewley-Taylor, 2003; Collins, 2018).

Re-legitimizing *Cannabis* and its derivatives in medicine (and as a medicine) while refusing to fully mainstream it might represent a unique opportunity for public health authorities to experiment with adapted regulatory schemes, socially and culturally sensible, it could contribute to the needed economic relocalizations while preventing larger, profit-driven investments from diverting public health objectives; it will facilitate the tailoring of conservation strategies when endangered plant varieties or traditional medical knowledge are at risk.

Beyond *Cannabis*, this report briefly looked at the "normative deficit" that curtailed WHO's assessments and how the ECDD Secretariat and Experts addressed it, and the "democratic deficit" at the CND level that the *Cannabis scheduling process* faced (Lohman and Barrett, 2020). While the democratic deficit calls for an articulation of a political voluntarism with efficient diplomacy, the normative issues and lack of a robust science-based framework for ECDD experts to unfold their work suggest a renewed approach to the methods and criteria for assessment of substances for international control, called on for by Danenberg *et al.* (2013) and inspired in recognized methods such as the Multi-Criteria Decision Analysis proposed by Nutt and colleagues (2007). But the fundamental bias in relation with CCDs, as well as with the two other traditional herbal medicines lacking scientific assessments (coca leaf and opium) yet serving as a criteria for placing other drugs under international control, suggests that a

broader reform of the framework provided by the Conventions might be the next step towards a real public health approach to, and "scientific evidence-based review and scheduling of the most prevalent, persistent and harmful substances" (UNGASS, 2016, p.15). This report might bring helpful insights, in light of the renewed interest of international drug control bodies for a number of traditional plants, fungi, and their preparations, that are not yet under control, like ayahuasca, ephedra, iboga, khat, kratom, peyote, psilocibes, salvia (INCB, 2013, p. 46).

For the time being, and since their inception in 1946, both CND and WHO have been able (although with difficulties) to admit an historical mistake and take action, relying on evidence, to correct it. Something that many patients (European coalition..., 2020) and healthcare professionals (Multidisciplinary Association..., 2020; Spence, 2020; Vienna NGO Committee..., 2020) have certainly been able to celebrate. International law and a rule-based order also depends on people being able to celebrate it.

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REFERENCES

Adhanom Ghebreyesus, T. (2018), *Letter to His Excellency, Mr António Guterres, Secretary-General of the United Nations, New York; dated 23 July 2018.* https://www.who.int/medicines/access/controlled-substances/UNSG_SignedDGletter.pdf

Adhanom Ghebreyesus, T. (2019). *Letter to His Excellency, Mr António Guterres, Secretary-General of the United Nations, New York; dated 24 January 2019.* https://www.who.int/medicines/access/controlled-substances/UNSG_letter_ECDD41_recommendations_cannabis_24Jan19.pdf

Antoine, RM.B. and Douglas, KG., (Eds.) (2018). *Report of the CARICOM regional Commission on Marijuana 2018; Waiting to exhale – safeguarding our future through responsible socio-legal policy on marijuana.* Georgetown: Caribbean Community Secretariat. https://caricom.org/final-report-report-of-the-caricom-regional-commission-on-marijuana/

Archive.org (2020a). *Web archive of the page https://news.un.org/en/story/2020/12/1079132 as available on the internet on 2 December 2020 at 22h59.* Archived page https://web.archive.org/web/20201202225927/https://news.un.org/en/story/2020/12/1079132

Archive.org (2020b). *Web archive of the page https://news.un.org/en/story/2020/12/1079132 as available on the internet on 8 December 2020 at 17h50.* Archived page https://web.archive.org/web/20201208175023/https://news.un.org/en/story/2020/12/1079132

Arnold, J. (2018a). "Section 3: Toxicology", in: Poovendran, D. and De Zwart, W. (Eds.), *Cannabis and cannabis resin. Pre-Review Report. Expert Committee on Drug Dependence, Fortieth meeting (Geneva, 4-7 June 2018).* Geneva: World Health Organization. https://www.who.int/medicines/access/controlled-substances/Section3toxicologyCannabisPlant.pdf

Arnold, J. (2018b). "Section 3: Toxicology", in: Poovendran, D. and De Zwart, W. (Eds.), *Extracts and tinctures of cannabis. Pre-Review Report. Expert Committee on Drug Dependence, Fortieth meeting (Geneva, 4-7 June 2018).* Geneva: World Health Organization. https://www.who.int/medicines/access/controlled-substances/Section3Toxicology.pdf

Arnold, J. (2018c). "Section 3: Toxicology", in: Poovendran, D. and De Zwart, W. (Eds.), *Delta-9-tetrahydrocannabinol. Pre-Review Report. Expert Committee on Drug Dependence, Fortieth meeting (Geneva, 4-7 June 2018).* Geneva: World Health Organization. https://www.who.int/medicines/access/controlled-substances/Section3-thc-Toxicology.pdf

Arnold, J. (2018d). "Section 3: Toxicology", in: Poovendran, D. and De Zwart, W. (Eds.), *Isomers of THC. Pre-Review Report. Expert Committee on Drug Dependence, Fortieth meeting (Geneva, 4-7 June 2018).* Geneva: World Health Organization. https://www.who.int/medicines/access/controlled-substances/Section3-iso-Toxicology.pdf

Australian Embassy in Vienna and Permanent Mission to the United Nations. (2021). *Australian Country Statement 64th Session of the Commission on Narcotic Drugs Vienna, 12-16 April 2021.* https://www.unodc.org/documents/commissions/CND/CND_Sessions/CND_64/Statements/13April/Australia.pdf

Bannister, M. (2021). "UN Commission on Narcotic Drugs Votes to Remove Cannabis from List of Schedule IV Narcotics." *International Enforcement Law Reporter Blog.* https://ielrblog.com/index.php/2021/01/12/un-commission-on-narcotic-drugs-votes-to-remove-cannabis-from-list-of-schedule-iv-narcotics/

Bewley-Taylor, D.R. (2003). "Challenging the UN drug control conventions: problems and possibilities." *International Journal of Drug Policy* **14**(2):171–179. DOI:10.1016/s0955-3959(03)00005-7

Bewley-Taylor, D.R., and Jelsma, M. (2011). "Fifty Years of the 1961 Single Convention on Narcotic Drugs: A Reinterpretation." *Series on Legislative Reform of Drug Policies* **12**. http://fileserver.idpc.net/library/fifty-years-of-1961-single-convention.pdf

Blavoukos, S., and Bourantonis, D. (2013). "The Role and Power of the Chairs in International Organizations", in: Reinalda, B. (Ed.), *Routledge Handbook of International Organization*. New-York: Routledge, pp. 312–323. ISBN: 978-0-415-50143-9.

Bridgeman, M.B., and Abazia, D.T. (2017). "Medicinal Cannabis: History, Pharmacology, And Implications for the Acute Care Setting". *Pharmacy and therapeutics* **42**(3):180–188.

Brownfield, W.R. (2014). *Trends in Global Drug Policy; New-York Foreign Press Center Briefings; 9 October 2014.* Washington, DC: U.S. Department of State. Archived page https://web.archive.org/web/20141217111131/http://fpc.state.gov/232813.htm

Cannazza, G. and Citti, C. (2018a). "Section 1: Chemistry", in: Poovendran, D. and De Zwart, W. (Eds.), *Cannabis and cannabis resin. Pre-Review Report. Expert Committee on Drug Dependence, Fortieth meeting (Geneva, 4-7 June 2018).* Geneva: World Health Organization. https://www.who.int/medicines/access/controlled-substances/Section1CannabisPlantChemistry.pdf

Cannazza, G. and Citti, C. (2018b). "Section 1: Chemistry", in: Poovendran, D. and De Zwart, W. (Eds.), *Extracts and tinctures of cannabis. Pre-Review Report. Expert Committee on Drug Dependence, Fortieth meeting (Geneva, 4-7 June 2018).* Geneva: World Health Organization. https://www.who.int/medicines/access/controlled-substances/Section1Chemistry.pdf

Cannazza, G. and Citti, C. (2018c). "Section 1: Chemistry", in: Poovendran, D. and De Zwart, W. (Eds.), *Delta-9-tetrahydrocannabinol. Pre-Review Report. Expert Committee on Drug Dependence, Fortieth meeting (Geneva, 4-7 June 2018).* Geneva: World Health Organization. https://www.who.int/medicines/access/controlled-substances/Section1-thc-Chemistry.pdf

Cannazza, G. and Citti, C. (2018d). "Section 1: Chemistry", in: Poovendran, D. and De Zwart, W. (Eds.), *Isomers of THC. Pre-Review Report. Expert Committee on Drug Dependence, Fortieth meeting (Geneva, 4-7 June 2018).* Geneva: World Health Organization. https://www.who.int/medicines/access/controlled-substances/Section1-iso-Chemistry.pdf

Clarke, M. (2018). "Presentation of Fields of Green for ALL - South Africa", in: *40th ECDD Open Session Presentations.* Archived page https://web.archive.org/web/20181018171542/http://www.who.int:80/medicines/access/controlled-substances/40th_ecdd_open-session/en/

CND Chair (2020). "Intersessional considerations of the WHO recommendations on cannabis and cannabis-related substances – Follow-up to CND Decision 63/14. Non-Paper prepared by the Chair with assistance of the Secretariat (revised version following the silent procedure, deadline 19 May 2020)", in: *Facsimile - Procedural discussions around cannabis vote at CND63. (2020).* https://faaat.net/wp-content/uploads/Facsimile-Procedural_discussions_around_cannabis_vote_at_CND63.pdf

CNDmonitor (2020). *Monitoring the UN/WHO cannabis scheduling process, CND monitor V6.7 (30 November 2020).* Archived page https://web.archive.org/web/20201201132504/https://kenzi.zemou.li/cndmonitor

Collins, J. (2018). "Rethinking 'flexibilities' in the international drug control system—potential, precedents and models for reforms." *International Journal of Drug Policy* **60**:107-114. DOI: 10.1016/j.drugpo.2016.12.014

Collins, J. (2020). "A brief history of Cannabis and the Drug Conventions. Conference paper", in: *Symposium on drug decriminalization, legalization, and international law.* DOI:10.1017/aju.2020.55

Commission on Narcotic Drugs. (1991). *Decision 2 (XXXIV) Transfer of delta-9-THC and its stereochemical variants from Schedule I to Schedule II of the Convention on Psychotropic Substances, 1971.* www.unodc.org/documents/commissions/CND/Drug_Resolutions/1990-1999/1991/CND_Decision-34-2_XXXIV.pdf

Commission on Narcotic Drugs. (2009). *Resolution 52/5; Exploration of all aspects related to the use of cannabis seeds for illicit purposes.* https://www.unodc.org/documents/commissions/CND/Drug_Resolutions/2000-2009/2009/CND_Res-52-5.pdf

Commission on Narcotic Drugs. (2016a). *Reconvened fifty-ninth session Vienna, 30 November-2 December 2016: Annotated provisional agenda; Addendum. [E/CN.7/2016/1/Add.1].* https://www.undocs.org/E/CN.7/2016/1/Add.1

Commission on Narcotic Drugs. (2016b). *Report on the reconvened fifty-ninth session (30 November-2 December 2016), Economic and Social Council Official Records, 2016 Supplement No. 8A. [E/2016/28/Add.1].* https://www.undocs.org/E/2016/28/ADD.1

Commission on Narcotic Drugs. (2019a). *Note by the Secretariat. Changes in the scope of control of substances: proposed scheduling recommendations by the World Health Organization on cannabis and cannabis-related substances. [E/CN.7/2019/12].* https://undocs.org/E/CN.7/2019/12

Commission on Narcotic Drugs. (2019b). *Report on the sixty-second session (7 December 2018 and 14–22 March 2019), Economic and Social Council Official Records, 2019 Supplement No. 8. [E/2019/28].* https://undocs.org/E/2019/28

Commission on Narcotic Drugs. (2020a). *Report on the sixty-third session (13 December 2019 and 2–6 March 2020), Economic and Social Council Official Records, 2020 Supplement No. 8. [E/2020/28].* https://undocs.org/E/2020/28

Commission on Narcotic Drugs. (2020b). *Report on the reconvened sixty-third session (2–4 December 2020), Economic and Social Council Official Records, 2020 Supplement No. 8A. [E/2020/28/Add.1].* https://undocs.org/E/2020/28/Add.1

Commission on Narcotic Drugs. (2020c). *Note by the Secretariat. Consideration of the notification from the World Health Organization concerning scheduling under the Single Convention on Narcotic Drugs of 1961 as amended by the 1972 Protocol, and the Convention on Psychotropic Substances of 1971. [E/CN.7/2020/CRP.19].* https://www.unodc.org/documents/commissions/CND/CND_Sessions/CND_62Reconvened/ECN72020_CRP19_V2006823.pdf

Commission on Narcotic Drugs. (2020d). *Note by the Secretariat. Changes in the scope of control of substances: proposed scheduling recommendations by the World Health Organization on cannabis and cannabis-related substances. [E/CN.7/2020/CRP.9].* https://www.unodc.org/documents/commissions/CND/CND_Sessions/CND_63/CRPs/ECN72020_CRP9_V2001435.pdf

Commission on Narcotic Drugs. (2020e). *Draft decision submitted by the Chair. Changes in the scope of control of substances: proposed scheduling recommendations by the World Health Organization on cannabis and cannabis-related substances. [E/CN.7/2020/L.8].* https://undocs.org/E/CN.7/2020/L.8

Commission on Narcotic Drugs. (2020f). *Compilation of all questions and answers on the WHO recommendations on cannabis and cannabis-related substances raised during the fourth and fifth intersessional meeting of the Commission at its sixty-second session. [E/CN.7/2020/CRP.4].* https://www.unodc.org/documents/commissions/CND/CND_Sessions/CND_63/CRPs/ECN72020_CRP4_V2000845.pdf

Commission on Narcotic Drugs. (2020g). *Note by the Secretariat. Changes in the scope of control of substances: proposed scheduling recommendations by the World Health Organization on cannabis and cannabis-related substances. [E/CN.7/2020/14].* https://undocs.org/E/CN.7/2020/14

Commission on Narcotic Drugs. (2020h). *Note by the Secretariat. Statements following the voting on the WHO scheduling recommendations on cannabis and cannabis-related substances. [E/CN.7/2020/CRP.24].* https://www.unodc.org/documents/commissions/CND/CND_Sessions/CND_63Reconvened/ECN72020_CRP24_V2007524.pdf

Commission on Narcotic Drugs. (2021a). *Draft report, Addendum: General debate. [E/CN.7/2021/L.1/Add.1].* https://undocs.org/E/CN.7/2021/L.1/Add.1

Commission on Narcotic Drugs. (2021b). *Draft report, Addendum: Implementation of the international drug control treaties. [E/CN.7/2021/L.1/Add.3].* https://undocs.org/E/CN.7/2021/L.1/Add.3

Commission on Narcotic Drugs. (2021c). *The International Drug Control Conventions. Schedules of the Single Convention on Narcotic Drugs of 1961 as amended by the 1972 Protocol, as at 22 January 2021. [ST/CND/1/Add.1/Rev.7].* https://undocs.org/en/ST/CND/1/Add.1/Rev.7

Committee on Economic, Social and Cultural Rights (2020), *General comment No. 25 (2020) on science and economic, social and cultural rights (article 15 (1) (b), (2), (3) and (4) of the International Covenant on Economic, Social and Cultural Rights). [E/C.12/GC/25].* https://undocs.org/en/E/C.12/GC/25

Crocq, MA. (2020). "History of cannabis and the endocannabinoid system." *Dialogues Clin Neurosci* **22**(3):223–228. DOI:10.31887/DCNS.2020.22.3/mcrocq

Curran, V.H., Wiffen, P., Nutt, D.J., and Scholten, W. (2016). *Cannabis Review for the attention of the WHO (Cannabis and Cannabis Resin Pre-Review Report A document prepared for the World Health Organization Expert Committee on Drug Dependence Thirty-eight Meeting Geneva, 14 – 18 November 2016).* London: Drug Science. ISBN: 978-1-5272-0260-3. https://drugscience.org.uk/wp-content/uploads/2016/04/WHOcannabisreport.pdf

Danenberg, E., Sorge, L.A., Wieniawski, W., Elliott, S., Amato, L., and Scholten, W. K. (2013). "Modernizing methodology for the WHO assessment of substances for the international drug control conventions." *Drug and alcohol dependence* **131**(3):175–181. https://doi.org/10.1016/j.drugalcdep.2013.02.032

Drugreporter. (2020). "Cannabis Rescheduling - CND 2020", in: *Drugreporter Youtube channel [online].* https://www.youtube.com/watch?v=eu5mxnc0ekU

Economic and Social Council (1951), *Draft of the Single Convention. [E/CN.7/AC.3/3].* New-york: United Nations.

Economic and Social Council (1956), *The Single Convention, Second Draft. [E/CN.7/AC.3/7].* New-york: United Nations.

Economic and Social Council (1958), *The Single Convention, Third Draft. [E/CN.7/AC.3/9].* New-york: United Nations.

Embassy of Pakistan in Kabul (2021). *Ambassador.* www.pakembassykabul.org/en/information/ambassador/

European coalition for just and effective drug policies. (2020). *"Support patient access to medicine, vote yes!" Statement submitted by the European coalition for just and effective drug policies, a non-governmental organization in consultative status with the Economic and Social Council [E/CN.7/2020/NGO/7].* https://undocs.org/E/CN.7/2020/NGO/7

"Expert Peer Review 1." (2018a), in: Poovendran, D. and De Zwart, W. (Eds.), *Cannabis and cannabis resin. Pre-Review Report. Expert Committee on Drug Dependence, Fortieth meeting (Geneva, 4-7 June 2018).* Geneva: World Health Organization. https://www.who.int/medicines/access/controlled-substances/CannabisplantPeerReview1.pdf

"Expert Peer Review 1." (2018b), in: Poovendran, D. and De Zwart, W. (Eds.), *Extracts and tinctures of cannabis. Pre-Review Report. Expert Committee on Drug Dependence, Fortieth meeting (Geneva, 4-7 June 2018).* Geneva: World Health Organization. https://www.who.int/medicines/access/controlled-substances/Extracts-TincturesPeerReview1.pdf

"Expert Peer Review 1." (2018c), in: Poovendran, D. and De Zwart, W. (Eds.), *Delta-9-tetrahydrocannabinol. Pre-Review Report. Expert Committee on Drug Dependence, Fortieth meeting (Geneva, 4-7 June 2018).* Geneva: World Health Organization. https://www.who.int/medicines/access/controlled-substances/THCPeerReview1.pdf

"Expert Peer Review 1." (2018d), in: Poovendran, D. and De Zwart, W. (Eds.), *Isomers of THC. Pre-Review Report. Expert Committee on Drug Dependence, Fortieth meeting (Geneva, 4-7 June 2018).* Geneva: World Health Organization. https://www.who.int/medicines/access/controlled-substances/IsomersPeerReview1.pdf

"Expert Peer Review 2." (2018a), in: Poovendran, D. and De Zwart, W. (Eds.), *Cannabis and cannabis resin. Pre-Review Report. Expert Committee on Drug Dependence, Fortieth meeting (Geneva, 4-7 June 2018).* Geneva: World Health Organization. https://www.who.int/medicines/access/controlled-substances/CannabisplantPeerReview2.pdf

"Expert Peer Review 2." (2018b), in: Poovendran, D. and De Zwart, W. (Eds.), *Extracts and tinctures of cannabis. Pre-Review Report. Expert Committee on Drug Dependence, Fortieth meeting (Geneva, 4-7 June 2018).* Geneva: World Health Organization. http://www.who.int/medicines/access/controlled-substances/ExtractsandTincturesPeerReview2.pdf

"Expert Peer Review 2." (2018c), in: Poovendran, D. and De Zwart, W. (Eds.), *Delta-9-tetrahydrocannabinol. Pre-Review Report. Expert Committee on Drug Dependence, Fortieth meeting (Geneva, 4-7 June 2018).* Geneva: World Health Organization. https://www.who.int/medicines/access/controlled-substances/THCPeerReview2.pdf

"Expert Peer Review 2." (2018d), in: Poovendran, D. and De Zwart, W. (Eds.), *Isomers of THC. Pre-Review Report. Expert Committee on Drug Dependence, Fortieth meeting (Geneva, 4-7 June 2018).* Geneva: World Health Organization. https://www.who.int/medicines/access/controlled-substances/IsomersPeerReview2.pdf

FAAAT. (2019). *Press release — WHO changes position on medical Cannabis after 60 years. Geneva, January 31st, 2019.* https://faaat.net/blog/ecdd41-outcome

FAAAT. (2020). *Press release — History made today: UN recognizes medical cannabis. Vienna, December 2nd, 2020.* https://faaat.net/blog/press-release-united-nations-recognize-medical-cannabis-december-2020/

Facsimile - *Procedural discussions around cannabis vote at CND63. (2020).* https://faaat.net/wp-content/uploads/Facsimile-Procedural_discussions_around_cannabis_vote_at_CND63.pdf

Fankhauser, M. (2008). "Cannabis as medicine in Europe in the 19th century', in: *A cannabis reader: global issues and local experiences, Monograph series 8, Volume 1*, pp. 3–16. Lisbon: European Monitoring Centre for Drugs and Drug Addiction. http://www.emcdda.europa.eu/publications/monographs/cannabis

Forte, G. (2020). *41st Expert Committee on Drug Dependence; Recommendations on Cannabis and Cannabis related substances. [Presentation at the 4th intersessional meeting of the 62nd Commission on narcotic drugs, 24 June 2019].* https://www.unodc.org/documents/commissions/CND/CND_Sessions/CND_62/41ST_ECDD_RECOMMENDATIONS_-_24_JUNE.pdf

Ghehiouèche, F. and Riboulet-Zemouli, K. (2016). *Summary: Mailing action to ask for an amendment of the agenda of the Expert Committee on Drug Dependence 38th meeting.* https://faaat.net/wp-content/uploads/SUMMARY-MAILING-ACTION-38th-ECDD-SHORT.pdf

Hallam, C., Bewley-Taylor, D., and Jelsma, M. (2014). "Scheduling in the international drug control system" *Series on legislative reform of drug policies* **25**.

Hill, KP., Pollack, CV., Spahr, J., and Bakewell, B. (2018a). "Section 4: Therapeutic use", in: Poovendran, D. and De Zwart, W. (Eds.), *Cannabis and cannabis resin. Pre-Review Report. Expert Committee on Drug Dependence, Fortieth meeting (Geneva, 4-7 June 2018).* Geneva: World Health Organization. https://www.who.int/medicines/access/controlled-substances/Section4therapeuticuseCannabisPlant.pdf

Hill, KP., Pollack, CV., Spahr, J., and Bakewell, B. (2018b). "Section 4: Therapeutic use", in: Poovendran, D. and De Zwart, W. (Eds.), *Extracts and tinctures of cannabis. Pre-Review Report. Expert Committee on Drug Dependence, Fortieth meeting (Geneva, 4-7 June 2018).* Geneva: World Health Organization. https://www.who.int/medicines/access/controlled-substances/Section4Therapeuticuse.pdf

Hill, KP., Pollack, CV., Spahr, J., and Bakewell, B. (2018c). "Section 4: Therapeutic use", in: Poovendran, D. and De Zwart, W. (Eds.), *Delta-9-tetrahydrocannabinol. Pre-Review Report. Expert Committee on Drug Dependence, Fortieth meeting (Geneva, 4-7 June 2018).* Geneva: World Health Organization. https://www.who.int/medicines/access/controlled-substances/Section4-thc-Therapeuticuse.pdf

Hill, KP., Pollack, CV., Spahr, J., and Bakewell, B. (2018d). "Section 4: Therapeutic use", in: Poovendran, D. and De Zwart, W. (Eds.), *Isomers of THC. Pre-Review Report. Expert Committee on Drug Dependence, Fortieth meeting (Geneva, 4-7 June 2018).* Geneva: World Health Organization. https://www.who.int/medicines/access/controlled-substances/Section4-iso-TherapeuticUse.pdf

INCB. (2013). *Report of the International Narcotics Control Board for 2012 (E/INCB/2012/1).* New-York: United Nations. https://www.incb.org/documents/Publications/AnnualReports/AR2012/AR_2012_E.pdf

INCB. (2014). *Report of the International Narcotics Control Board for 2013 (E/INCB/2013/1).* New-York: United Nations. https://www.incb.org/documents/Publications/AnnualReports/AR2013/English/AR_2013_E.pdf

Kendell, R. (2003). "Cannabis condemned: the proscription of Indian hemp." *Addiction* **98**(2), pp. 143–151. DOI:10.1046/j.1360-0443.2003.00273.x

Khan, T. (2020, June 19). Pakistan appoints Mansoor Khan as new ambassador to Afghanistan. *Daily Times Pakistan.* https://dailytimes.com.pk/628735/pakistan-appoints-mansoor-khan-as-new-ambassador-to-afghanistan/

Krawitz, M.A., and Riboulet-Zemouli, K. (2019). *Memo for State Parties. Changes in the scope of international control of medical Cannabis and cannabinoids. 4th inter-sessional meeting, 62nd Commission on Narcotic Drugs, June 24th, 2019.* https://www.researchgate.net/publication/333972228

Krawitz, M.A., Riboulet-Zemouli, K., Bañas, B., Beitzke, B., Borden, D., Bouso, J.C., *et al.* (2018). *ECDD40: Procedural, methodological and terminological bias; Joint Civil Society Contribution to the 40th Meeting of the WHO Expert Committee on Drug Dependence.* https://www.researchgate.net/publication/333825738

Lande, A. (1962). The Single Convention on Narcotic Drugs, 1961. *International Organization* **16**(4):776–797. DOI:10.1017/s0020818300011620

Lohman, D., & Barrett, D. (2020). Scheduling medicines as controlled substances: addressing normative and democratic gaps through human rights-based analysis. *BMC international health and human rights* **20**(1):10. https://doi.org/10.1186/s12914-020-00231-1

McAllister, W.B. (2000). *Drug diplomacy in the twentieth century*. New-York: Routledge.

Mayor, S. (2019). "WHO proposes rescheduling cannabis to allow medical applications" *BMJ* **364**:l574.

Mikuriya, T. (1969). Marijuana in medicine: past, present and future. *California Medicine* **110**(1):34–40. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC1503422/pdf/califmed00019-0036.pdf

Mills, J.H. (2003). *Cannabis britannica: Empire, Trade, and Prohibition*. Oxford: Oxford University Press.

Mills, J.H. (2016). "The IHO as actor : the case of cannabis and the Single Convention on Narcotic Drugs 1961." *Hygiea Internationalis* **13**(1):95-115.

Mission interministérielle de lutte contre les drogues et les conduites addictives. (2021). *Déclaration de la France, 64ème Session de la Commission des Stupéfiants Vienne, 12-16 Avril 2021.* https://www.unodc.org/documents/commissions/CND/CND_Sessions/CND_64/Statements/13April/France.pdf

Multidisciplinary Association for Psychedelic Studies. (2020). *"Towards science-based scheduling of cannabis sativa and other controlled herbal medicines" Statement submitted by the Multidisciplinary Association for Psychedelic Studies, a non-governmental organization in consultative status with the Economic and Social Council [E/CN.7/2020/NGO/8].* https://undocs.org/E/CN.7/2020/NGO/8

New Zealand Embassy to Austria and Permanent Mission to the United Nations (2021). *Sixty-Fourth Commission on Narcotic Drugs, 12-16 April 2021, New Zealand Statement.* Vienna: New Zealand Foreign Affairs & Trade / Manatū Aorere. https://www.unodc.org/documents/commissions/CND/CND_Sessions/CND_64/Statements/13April/New_Zealand.pdf

Nutt, D. (2019). "Why medical cannabis is still out of patients' reach—an essay by David Nutt." ***BMJ*** l1903. DOI:10.1136/bmj.l1903

Nutt, D.J., King, L.A., and Nichols, D.E. (2013). "Effects of Schedule I drug laws on neuroscience research and treatment innovation". *Nature Reviews Neuroscience* **14**:577–585.

Nutt, D., King, L. A., Saulsbury, W., & Blakemore, C. (2007). "Development of a rational scale to assess the harm of drugs of potential misuse." *Lancet* **369**(9566):1047–1053. https://doi.org/10.1016/S0140-6736(07)60464-4

O'Grady, C. (2020). "Cannabis research data reveals a focus on harms of the drug Funding for therapies grows slowly, new analysis finds." *Science* **369**(6508):1155. DOI:10.1126/science.369.6508.1155

Permanent Mission of Jamaica to the United Nations – Geneva. (2021). *National Statement, General debate, 64th Session of the Commission on Narcotic Drugs, 12th to 16th April 2021, Vienna, Austria.* https://www.unodc.org/documents/commissions/CND/CND_Sessions/CND_64/Statements/13April/Jamaica.pdf

Permanent mission of Nigeria to international organizations in Vienna. (2020). *Nigeria's intervention at the CND intersessional meeting on 8 october 2020. [Online].* https://www.unodc.org/documents/commissions/CND/CND_Sessions/CND_63/2nd_ISM/Nigeria.pdf

Permanent Mission of Uruguay to the United Nations Office, Vienna (2021). *64° Periodo de Sesiones de la CND, Discurso Uruguay, 13 abril 2021.* https://www.unodc.org/documents/commissions/CND/CND_Sessions/CND_64/Statements/13April/Uruguay.pdf

Pisanti, S., and Bifulco, M. (2017). Modern History of Medical Cannabis: From Widespread Use to Prohibitionism and Back. *Trends in Pharmacological Sciences* **38**(3):195–198. DOI:10.1016/j.tips.2016.12.002

Pisanti, S., and Bifulco, M. (2018). Medical Cannabis : A plurimillennial history of an evergreen. *Journal of Cellular Physiology* **234**(6):8342–8351. DOI:10.1002/jcp.27725

Poovendran, D. and De Zwart, W. (Eds.) (2018a). *Cannabis and cannabis resin. Critical Review Report. Expert Committee on Drug Dependence, Forty-first Meeting (Geneva, 12-16 November 2018).* Geneva: World Health Organization. https://www.who.int/medicines/access/controlled-substances/Cannabis-and-cannabis-resin.pdf?ua=1

Poovendran, D. and De Zwart, W. (Eds.) (2018b). *Extracts and tinctures of cannabis. Critical Review Report. Expert Committee on Drug Dependence, Forty-first Meeting (Geneva, 12-16 November 2018).* Geneva: World Health Organization. https://www.who.int/medicines/access/controlled-substances/Extracts-and-tinctures.pdf?ua=1

Poovendran, D. and De Zwart, W. (Eds.) (2018c). *Delta-9-tetrahydrocannabinol. Critical Review Report. Expert Committee on Drug Dependence, Forty-first Meeting (Geneva, 12-16 November 2018).* Geneva: World Health Organization. https://www.who.int/medicines/access/controlled-substances/THCv1.pdf?ua=1

Poovendran, D. and De Zwart, W. (Eds.) (2018d). *Isomers of THC. Critical Review Report. Expert Committee on Drug Dependence, Forty-first Meeting (Geneva, 12-16 November 2018).* Geneva: World Health Organization. https://www.who.int/medicines/access/controlled-substances/IsomersTHC.pdf?ua=1

Rehm, J., Otto, A., Manthey, J., Thakkar, V., Hasan, OSM., Probst, C., and Sauer, J. (2018a). "Section 5: Epidemiology", in: Poovendran, D. and De Zwart, W. (Eds.), *Cannabis and cannabis resin. Pre-Review Report. Expert Committee on Drug Dependence, Fortieth meeting (Geneva, 4-7 June 2018).* Geneva: World Health Organization. https://www.who.int/medicines/access/controlled-substances/Section5epidemiologyCannabisPlant.pdf

Rehm, J., Otto, A., Manthey, J., Thakkar, V., Hasan, OSM., Probst, C., and Sauer, J. (2018b). "Section 5: Epidemiology", in: Poovendran, D. and De Zwart, W. (Eds.), *Extracts and tinctures of cannabis. Pre-Review Report. Expert Committee on Drug Dependence, Fortieth meeting (Geneva, 4-7 June 2018).* Geneva: World Health Organization. https://www.who.int/medicines/access/controlled-substances/Section5Epidemiology.pdf

Rehm, J., Otto, A., Manthey, J., Thakkar, V., Hasan, OSM., Probst, C., and Sauer, J. (2018c). "Section 5: Epidemiology", in: Poovendran, D. and De Zwart, W. (Eds.), *Delta-9-tetrahydrocannabinol. Pre-Review Report. Expert Committee on Drug Dependence, Fortieth meeting (Geneva, 4-7 June 2018).* Geneva: World Health Organization. https://www.who.int/medicines/access/controlled-substances/Section5-thc-epidemiology.pdf

Rehm, J., Otto, A., Manthey, J., Thakkar, V., Hasan, OSM., Probst, C., and Sauer, J. (2018d). "Section 5: Epidemiology", in: Poovendran, D. and De Zwart, W. (Eds.), *Isomers of THC. Pre-Review Report. Expert Committee on Drug Dependence, Fortieth meeting (Geneva, 4-7 June 2018).* Geneva: World Health Organization. https://www.who.int/medicines/access/controlled-substances/Section5-iso-epidemiology.pdf

Rexed, B., Edmondson, K., Khan, I., and Samsom, R.J. (1984). *Guidelines for the Control of Narcotic and Psychotropic Substances in the context of the international treaties.* Geneva: World Health Organization. ISBN: 94-4-154172-5.

Riboulet-Zemouli, K. (2020a). *CBD as a 'narcotic'? Food for thought.* Barcelona: FAAAT editions. ISBN: 979-10-97087-77-7. https://www.researchgate.net/publication/343768923

Riboulet-Zemouli, K. (2020b). "'Cannabis' ontologies I: Conceptual issues with Cannabis and cannabinoids terminology." *Drug Science, Policy and Law* **6**:1–37. DOI: 10.1177/2050324520945797. www.researchgate.net/publication/343988256

Riboulet-Zemouli, K. (2020c). *U.N. vote on CBD: seeing through the smokescreen of confusions.* Barcelona: Fundación Canna. https://www.fundacion-canna.es/en/un-vote-cbd-seeing-through-smokescreen-confusions

Riboulet-Zemouli, K. and Ghehiouèche, F. (2016). *Statement to the Commission on Narcotic Drugs Intersessional Meeting — Vienna — October 27th 2016 Operational recommendations of the UNGASS 2016 outcome document.* https://faaat.net/wp-content/uploads/CND-INTERSESSION-CS-CONTRIBUTION-FAAAT-2.pdf

Riboulet-Zemouli, K., and Krawitz, M.A. (2021). *Voluntary contribution to INCB Guidelines on Medical Cannabis – due diligence, good faith, & technical concerns.* Vienna: FAAAT editions. https://www.researchgate.net/publication/349572996

Riboulet-Zemouli, K., Krawitz, M.A., Ghehiouèche, F. (2018). *The Crimson Digest, volume 1, Briefing on the international scientific assessment of cannabis: processes, stakeholders and history.* Paris: FAAAT editions. ISBN: 979-10-97087-06-7. https://www.researchgate.net/publication/333825934

Seconde conférence internationale pour l'unification de la formule des médicaments héroïques (1925). Docket 12B/36019/36019. Geneva: United Nations Archives. https://archive.org/details/unification_formulas_potent_drugs_1925_UNOG_archive

Secretaría Nacional Antidrogas. (2021). *Intervención Nacional de la República del Paraguay, entregada por la Ministra Zully Rolón, en el segmento de alto nivel de la 64º Sesión de la Comisión de Estupefacientes.* https://www.unodc.org/documents/commissions/CND/CND_Sessions/CND_64/Statements/13April/Paraguay_English.pdf

Smith, P. (2020). "In historic vote, the UN no longer considers cannabis one of the most dangerous drugs." *Salon.com*. http://salon.com/2020/12/10/in-historic-vote-the-un-no-longer-considers-cannabis-one-of-the-most-dangerous-drugs_partner/

South African Embassy and Permanent Mission in Vienna. (2021a). *National statement by Ambassador RS Molekane of the Republic of South Africa at the 64th Session of the Commission. Agenda 3: General debate.* Vienna: South African Embassy and Permanent Mission. https://www.unodc.org/documents/commissions/CND/CND_Sessions/CND_64/Statements/13April/South_Africa.pdf

South African Embassy and Permanent Mission in Vienna. (2021b). *South African statement on Agenda item 5b.* Vienna: South African Embassy and Permanent Mission.

Spence, D. (2020). *Cannabis as Medicine: A Jamaican Experience. Statement submitted by the International Association for Hospice & Palliative Care, a non-governmental organization in consultative status with the Economic and Social Council [E/CN.7/2020/NGO/9].* https://undocs.org/E/CN.7/2020/NGO/9

"The cannabis problem: A note on the problem and the history of international action." (1962). *Bulletin on Narcotics* **14**(4):27–31. https://www.unodc.org/unodc/en/data-and-analysis/bulletin/bulletin_1962-01-01_4_page005.html

Ulyanov, M. (2020). *Tweet on 5 December 2020 at 17h13.* https://twitter.com/Amb_Ulyanov/status/1335255917324079105

United Nations. (1973). *Commentary on the Single Convention on Narcotic Drugs, 1961 [United Nations Publications No. E.73.XI.1].* New York: United Nations. https://www.unodc.org/documents/commissions/CND/Int_Drug_Control_Conventions/Commentaries-OfficialRecords/1961Convention/1961_COMMENTARY_en.pdf

United Nations. (1983). *Rules of Procedure of the Functional Commissions of the Economic and Social Council [United Nations Publications No. 83.I.10].* New York: United Nations. https://digitallibrary.un.org/record/50230

UNGASS. (2016). *Outcome document of the thirtieth special session of the General Assembly, entitled "Our joint commitment to effectively addressing and countering the world drug problem", General Assembly resolution S-30-1, annex.* Adopted on 19 April 2016. https://undocs.org/en/A/RES/S-30/1

United Nations Global Marketplace. (2017). *Author contributions to WHO Expert Committee on Drug Dependence (ECDD) Pre-Reviews of Cannabis-Related Substances; Request for Proposals. [Reference: HQ/HIS/EMP/IAU/2017/004].* https://www.ungm.org/Public/Notice/63472

UNODC. (2019). *Questions and answers relating to WHO's recommendations on cannabis and cannabis-related substances Status: 26 November 2019.* [Online] https://www.unodc.org/documents/commissions/CND/Scheduling_Resource_Material/Cannabis/Consultations_with_WHO_Questions_and_Answers_26_November_2019.pdf

UNODC. (2020a). *Scheduling Procedures under the International Drug Control Conventions.* Vienna: United Nations. https://www.unodc.org/documents/commissions/CND/Scheduling_Resource_Material/19-11955_Drug_Conventions_eBook.pdf

UNODC (2020b). *WHO scheduling recommendations on cannabis and cannabis-related substances [March 2021 version].* https://web.archive.org/web/20210328174111/https://www.unodc.org/unodc/en/commissions/CND/Mandate_Functions/current-scheduling-recommendations.html

UNODC. (2020c). *Secretariat to the Governing Bodies.* Vienna: United Nations Office on Drugs and Crime. https://www.unodc.org/documents/commissions/Secretariat/Secretariat_Publications/19-10643_SGB.pdf

UNODC. (2020d). *Commission on narcotic drugs; Membership and Bureau. [archived version, 23 September 2020].* Archived page https://web.archive.org/web/20200923151033/https://www.unodc.org/unodc/en/commissions/CND/Membership/Membership.html

UNODC. (2020e). *CND Newsletter July - December 2020.* https://www.unodc.org/documents/commissions/Secretariat/Secretariat_Publications/Newsletters/CND_newsletter_Jul-Dec_2020.pdf

UNODC. (2020f). *Documentation: Sixty-third session, Second intersessional meeting, 8 October 2020, 10.30 a.m. Vienna Time (CET), Commission on narcotic drugs. [Online].* https://www.unodc.org/unodc/en/commissions/CND/session/63_Session_2020/2nd_ism_cannabis_recommendations.html

UNODC. (2020g.) *Documentation: Reconvened Sixty-third session, Commission on narcotic drugs. [Online].* https://www.unodc.org/unodc/en/commissions/CND/session/63Reconvened_Session_2020/reconvened-session-63-of-the-commission-on-narcotic-drugs.html

UNODC. (2021). *Statements at the Opening and General Debate, 64th session of the Commission on Narcotic Drugs, 12-16 April 2021.* [online]. https://www.unodc.org/unodc/en/commissions/CND/session/64_Session_2021/general_debate_statements.html

United Nations Secretariat. (2021). *Circular Letter No.3: Notification of Commission on Narcotic Drugs (CND) decisions 63/17, 63/18, 63/19, 63/20, and 63/21, under Article 3, paragraph 7, of the Single Convention on Narcotic Drugs of 1961, as amended by the 1972 Protocol, and Article 2, paragraph 7, of the Convention on Psychotropic Substances of 1971. [NAR/CL.3/2021 (A). 1961C-Art.3; 1971C-Art. 2. CU 2021/12(A)/DTA/SGB].* Vienna: United Nations Office on Drugs and Crime. https://faaat.net/unsg-unodc-circularletter3-cannabis-scheduleiv-2021/

United States Bureau of International Narcotics and Law Enforcement Affairs. (2020). *Handout for External Use: Possible responses to WHO/ECDD Cannabis Scheduling Recommendations.* Washington, D.C.: Department of State.

United States Mission to International Organizations in Vienna. (2020). *U.S. Explanation of Vote on Changes in the Scope of Control of Cannabis and Cannabis-related Substances.* https://www.unodc.org/documents/commissions/CND/CND_Sessions/CND_63Reconvened/statements/02Dec_partI/USA.pdf

Vienna NGO Committee on Drugs. (2020). *Intervention from Dr. Joel Wren, Society of Cannabis Clinicians (Australia), providing an Australian perspective on the medical use of cannabis; 2nd CND intersessional meeting 2020 on the WHO recommendations on cannabis and cannabis related substances.* https://www.youtube.com/watch?v=sd46uteQaNQ

Walsh, S. Babalonis, S., Rehm, J., et al. (Eds.) (2017). *CANNABIDIOL (CBD) Pre-Review Report. Pre-Review Report [Agenda Item 5.2] Expert Committee on Drug Dependence, Thirty-ninth Meeting (Geneva, 6-10 November 2017).* Geneva: World Health Organization. https://www.who.int/medicines/access/controlled-substances/5.2_CBD.pdf

Walsh, S. Babalonis, S., Rehm, J., et al. (Eds.) (2018). *CANNABIDIOL (CBD). Critical Review Report. Expert Committee on Drug Dependence, Fortieth Meeting (Geneva, 4-7 June 2018).* Geneva: World Health Organization. https://www.who.int/medicines/access/controlled-substances/WHOCBDReportMay2018-2.pdf?ua=1

WHO. (1955). *Expert Committee on drugs liable to produce addiction, Fifth report [Technical Report Series, No. 95].* Geneva: WHO. http://apps.who.int/iris/bitstream/handle/10665/40262/WHO_TRS_95.pdf?sequence=1&isAllowed=y

WHO. (2010). *Guidance on the WHO review of psychoactive substances for international control.* Geneva: World Health Organization. http://www.who.int/medicines/areas/quality_safety/GLS_WHORev_PsychoactSubst_IntC_2010.pdf

WHO. (2016a). *Public health dimension of the world drug problem including in the context of the special session of the United Nations General Assembly on the world drug problem, held in April 2016. Report by the Secretariat, Sixty-ninth World Health Assembly, Provisional agenda item 12.6* [A69/12]. https://apps.who.int/gb/ebwha/pdf_files/WHA69/A69_12-en.pdf

WHO. (2016b)." Thirteenth meeting, Committee A", in: *Sixty-ninth World Health Assembly, Summary Records of Committees [WHA69/2016/REC/3]*. Geneva: World Health Organization, pp. 196–253. https://apps.who.int/gb/ebwha/pdf_files/WHA69-REC3/A69_2016_REC3-en.pdf

WHO. (2016c). *Extract from the Report of the 38th Expert Committee on Drug Dependence, convened from 14 to 18 November 2016, at WHO headquarters in Geneva [E/CN.7/2016/CRP.13].* https://www.unodc.org/documents/commissions/CND/CND_Sessions/CND_59Reconvened/ECN72016_CRP13_V1610192.pdf

WHO. (2016d). *WHO Expert Committee on Drug Dependence: Thirty-seventh report (WHO Technical Report Series No. 998).* Geneva: World Health Organization. http://apps.who.int/iris/bitstream/handle/10665/206452/WHO_TRS_998_eng.pdf?sequence=1

WHO. (2016e). *Request for Proposals: Author contributions to WHO Expert Committee on Drug Dependence (ECDD) Pre-Reviews of Cannabis-Related Substances. [Unit Name: Essential Medicines and Health Products; Bid Reference: HQ/HIS/EMP/2017/004].* Geneva: World Health Organization. https://faaat.net/wp-content/uploads/ECDD40_Request_for_Proposals_Author_contributions_HQ-HIS-EMP-2017-004_new.pdf

WHO. (2017). *39th WHO Expert Committee on Drug Dependence, Open Session Agenda.* https://www.who.int/medicines/access/controlled-substances/Open-Session-final-agenda-updated.pdf

WHO. (2017b). *WHO Expert Committee on Drug Dependence: Thirty-eighth report (WHO Technical Report Series, No. 1005).* Geneva: World Health Organization. https://apps.who.int/iris/bitstream/handle/10665/255046/9789241210140-eng.pdf?sequence=1&isAllowed=y

WHO. (2018a). *40th WHO Expert Committee on Drug Dependence, Open Session Agenda.* https://www.who.int/medicines/access/controlled-substances/OpenSessionAgenda.pdf

WHO. (2018b). *Role of the WHO under International Drug Control Conventions.* Geneva: World Health Organization. https://www.who.int/news-room/commentaries/detail/role-of-the-WHO-under-international-drug-control-conventions

WHO. (2018c). *WHO Expert Committee on Drug Dependence: Thirty-ninth report (WHO Technical Report Series, No. 1009).* Geneva: World Health Organization. https://apps.who.int/iris/bitstream/handle/10665/260546/9789241210188-eng.pdf

WHO. (2018d). *WHO Expert Committee on Drug Dependence: Fortieth report (WHO Technical Report Series, No. 1013).* Geneva: World Health Organization. https://apps.who.int/iris/bitstream/handle/10665/279948/9789241210225-eng.pdf

WHO. (2018e). *WHO ECDD Member State questionnaires for the 40th ECDD meeting.* Geneva: World Health Organization. https://web.archive.org/web/20180907095458/http://www.who.int/medicines/access/controlled-substances/ecdd_40_questionnaire/en/

WHO. (2019a). *WHO Expert Committee on Drug Dependence: Forty-first report (WHO Technical Report Series, No. 1018).* Geneva: World Health Organization. https://apps.who.int/iris/bitstream/handle/10665/325073/9789241210270-eng.pdf

WHO. (2019b). *WHO Global report on traditional and complementary medicine.* Geneva: World Health Organization. https://www.who.int/publications-detail-redirect/9789241515536

WHO. (2020). *Health product and policy standards, WHO review of cannabis and cannabis-related substances.* https://www.who.int/teams/health-product-and-policy-standards/controlled-substances/who-review-of-cannabis-and-cannabis-related-substances

WHO. (2021). *WHO Expert Committee on Drug Dependence: forty-third report (WHO Technical Report Series, No. 1034).* Geneva: World Health Organization. https://apps.who.int/iris/bitstream/handle/10665/340712/9789240023024-eng.pdf?sequence=1

Wiley, J. (2018a). "Section 2: Pharmacology", in: Poovendran, D. and De Zwart, W. (Eds.), *Cannabis and cannabis resin. Pre-Review Report. Expert Committee on Drug Dependence, Fortieth meeting (Geneva, 4-7 June 2018).* Geneva: World Health Organization. https://www.who.int/medicines/access/controlled-substances/Section2.CannabisPlant.Pharmacology.pdf

Wiley, J. (2018b). "Section 2: Pharmacology", in: Poovendran, D. and De Zwart, W. (Eds.), *Extracts and tinctures of cannabis. Pre-Review Report. Expert Committee on Drug Dependence, Fortieth meeting (Geneva, 4-7 June 2018).* Geneva: World Health Organization. https://www.who.int/medicines/access/controlled-substances/Section2Pharmacology.pdf

Wiley, J. (2018c). "Section 2: Pharmacology", in: Poovendran, D. and De Zwart, W. (Eds.), *Delta-9-tetrahydrocannabinol. Pre-Review Report. Expert Committee on Drug Dependence, Fortieth meeting (Geneva, 4-7 June 2018).* Geneva: World Health Organization. https://www.who.int/medicines/access/controlled-substances/Section2-thc-pharmacology.pdf

Wiley, J. (2018d). "Section 2: Pharmacology", in: Poovendran, D. and De Zwart, W. (Eds.), *Isomers of THC. Pre-Review Report. Expert Committee on Drug Dependence, Fortieth meeting (Geneva, 4-7 June 2018).* Geneva: World Health Organization. https://www.who.int/medicines/access/controlled-substances/Section2-iso-Pharmacology.pdf

Zlas, J., Stark, H., Seligman, J., Levy, R., Werker, E., Breuer, A., and Mechoulam, R. (1993). "Early medical use of cannabis." *Nature* **363**(6426), 215–215. DOI:10.1038/363215a0

Annexes

Annex I. List of stakeholders involved in WHO ECDD's cannabis-related assessments, in Geneva (2016-2019)

Stakeholder	Body (country)	Title	Gender	Involvement
Expert Committee on Drug Dependence[a]				
Patrick **Beardsley**	Virginia Commonwealth University (United States)	Professor of Pharmacology, Toxicology	♂	Expert at the 39th, 40th and 41st meetings. Rapporteur of the 39th and 40th meetings
Bruna **Brands**	*At the 39th and 40th meetings:* Faculty of Medicine, University of Toronto (Canada) *At the 41st meeting:* Office of Drug Science and Surveillance, Controlled Substances Directorate, Health Canada (Canada)	*At the 39th and 40th meetings:* Professor of Pharmacology and Toxicology *At the 41st meeting:* Senior Science Advisor	♀	Expert at the 39th, 40th and 41st meetings. Chair of the 39th and 40th meetings
Ifeoma Toyin **Ekwere**	Department of Anaesthesiology, University of Benin Teaching Hospital (Nigeria)	Senior Consultant Anaesthesiologist	♀	Expert at the 39th, 40th and 41st meetings
Simon **Elliott**	Independent (United Kingdom); King's College (United Kingdom)	Consultant Forensic Toxicologist; Visiting Professor in Forensic Toxicology	♂	Expert at the 39th, 40th and 41st meetings
Katia **Gysling**	Pontificia Universidad Católica (Chile)	Professor of Biological Sciences	♀	Temporary adviser at the 39th meeting. Expert at the 40th and 41st meetings
Raka **Jain**	National Drug Dependence Treatment Centre, All India Institute of Medical Sciences (India)	Professor of Chemistry	♀	Expert at the 39th, 40th and 41st meetings
Pamela **Kaduri**	Muhimbili University of Health and Allied Sciences (Tanzania) *At the 40th and 41st meetings, additionally:* University of Toronto (Canada)	Professor of Psychiatry	♀	Expert at the 39th, 40th and 41st meetings. Rapporteur of the 41st meeting
Junishi **Kitanaka**	Hyogo College of Medicine (Japan)	Professor of Pharmacology	♂	Expert at the 40th and 41st meetings
Sutisa **Nudmamud-Thanoi**	Faculty of Medical Science, Naresuan University (Thailand)	Professor of Anatomy	♀	Temporary adviser at the 39th meeting. Expert at the 40th and 41st meetings
Afarin **Rahimi-Movaghar**	Tehran University of Medical Sciences (Iran)	Professor of Psychiatry; Director, Iranian National Centre for Addiction Studies	♀	Expert at the 39th, 40th and 41st meetings. Co-chair of the 41st meeting
Jason **White**	University of South Australia (Australia)	Professor of Pharmacology; Head of the School of Pharmacy and Medical Sciences	♂	Expert at the 39th, 40th and 41st meetings. Co-chair of the 39th and 40th meetings. Chair of the 41st meeting Lead co-author of the Pre-review report on CBD (39th meeting)
Representatives of other International Organizations[b]				
Sevil **Atasoy**	INCB (Turkey)	Member of the Board	♀	39th meeting
Celso **Coracini**	UNODC	Crime Prevention and Criminal Justice Officer	♂	40th meeting
Beate **Hammond**	INCB Secretariat	Drug Control and Crime Prevention Officer	♀	39th and 41st meetings
Galina **Korchagina**	INCB (Russian federation)	Member of the Board	♀	40th meeting
Rossen **Popov**	INCB Secretariat	Deputy Secretary	♂	40th meeting
Justice **Tettey**	Laboratory and Scientific Section, Division for Policy Analysis and Public Affairs, UNODC	Chief	♂	39th, 40th, and 41st meetings
Jallal **Toufiq**	INCB (Morocco)	Member of the Board	♂	41st meeting

World Health Organization (temporary)[b]				
Mayyada **al Wazaify**	University of Jordan (Jordan)	Professor of Pharmacy Practice	♀	Temporary adviser at the 41st meeting
Jonathon **Arnold**	School of Medical Sciences, University of Sydney (Australia); Lambert Initiative for Cannabinoid Therapeutics (Australia)	Professor of Pharmacy; Deputy Academic Director	♂	Temporary adviser at the 40th meeting. Author of the toxicology sections of the Pre-review (40th meeting) and Critical-review (41st meeting) reports on all substances, except CBD
Shanna **Babalonis**	Center on Drug and Alcohol Research, University of Kentucky (United States)	Assistant Professor of Behavioral Science	♀	Co-editor of the Critical review report on CBD (40th meeting)
Brock **Bakewell**	Thomas Jefferson University (United States)	Research Assistant	♂	Co-author of the therapeutic use sections of the Pre-review (40th meeting) and Critical-review (41st meeting) reports on all substances, except CBD
Simon **Brandt**	Liverpool John Moores University (United Kingdom)	Associate Professor in Bioactive Drug Chemistry	♂	Temporary adviser at the 41st meeting
Giuseppe **Cannazza**	University of Modena and Reggio Emilia (Italy)	Researcher	♂	Temporary adviser at the 40th meeting. Co-author of the chemistry sections of the Pre-review (40th meeting) and Critical-review (41st meeting) reports on all substances, except CBD
Hye-Jin **Cha**	National Institute of Food and Drug Safety Evaluation, Ministry of Food and Drug safety (Republic of Korea)	Scientific officer	♀	Temporary adviser at the 39th meeting
Cinzia **Citti**	University of Modena and Reggio Emilia (Italy)	Researcher	♀	Co-author of the chemistry sections of the Pre-review (40th meeting) and Critical-review (41st meeting) reports on all substances, except CBD
Sandra **Comer**	Department of Psychiatry, Division of Substance Use Disorders, Columbia University (United States)	Professor of Neurobiology	♀	Temporary adviser at the 39th meeting
Omar S. M. **Hasan**	Centre for Addiction and Mental Health (Canada)	Research analyst	♂	Co-author of the epidemiology sections of the Pre-review (40th meeting) and Critical-review (41st meeting) reports on all substances, except CBD
Kevin P. **Hill**	Harvard Medical School (United States)	Associate Professor of Psychiatry	♂	Temporary adviser at the 40th meeting. Lead co-author of the therapeutic use sections of the Pre-review (40th meeting) and Critical-review (41st meeting) reports on all substances, except CBD
Jakob **Manthey**	Institute for Clinical Psychology and Psychotherapy, Dresden University of Technology (Germany)	Research assistant	♂	Co-author of the epidemiology sections of the Pre-review (40th meeting) and Critical-review (41st meeting) reports on all substances, except CBD. Co-author of the analysis of answers to the questionnaire to Member States for the 40th meeting (all substances). Co-editor of the Critical review report on CBD (40th meeting)
Astrid **Otto**	Centre for Addiction and Mental Health (Canada)	Scientific editor	♀	Co-author of the epidemiology sections of the Pre-review (40th meeting) and Critical-review (41st meeting) reports on all substances, except CBD. Co-author of the analysis of answers to the questionnaire to Member States for the 40th meeting (all substances). Co-editor of the Critical review report on CBD (40th meeting)
Charles Victor **Pollack**	Lambert Center for the Study of Medicinal Cannabis and Hemp, Thomas Jefferson University (United States)	Founding Director	♂	Co-author of the therapeutic use sections of the Pre-review (40th meeting) and Critical-review (41st meeting) reports on all substances, except CBD

Charlotte **Probst**	Centre for Addiction and Mental Health (Canada)	Independent scientist	♀	Co-author of the epidemiology sections of the Pre-review (40th meeting) and Critical-review (41st meeting) reports on all substances, except CBD
Jurgen **Rehm**	Centre for Addiction and Mental Health (Canada)	Senior director and Senior scientist	♂	Temporary adviser at the 40th meeting. Lead co-author of the epidemiology sections of the Pre-review (40th meeting) and Critical-review (41st meeting) reports on all substances, except CBD. Lead co-author of the analysis of answers to the questionnaire to Member States for the 40th meeting (all substances). Co-editor of the Critical review report on CBD (40th meeting)
Julian **Sauer**	Centre for Addiction and Mental Health (Canada)	*Unknown*	♀	Co-author of the epidemiology sections of the Pre-review (40th meeting) and Critical-review (41st meeting) reports on all substances, except CBD
Judith **Spahr**	Lambert Center for the Study of Medicinal Cannabis and Hemp, Thomas Jefferson University (United States)	Administrative director	♀	Co-author of the therapeutic use sections of the Pre-review (40th meeting) and Critical-review (41st meeting) reports on all substances, except CBD
Vidhi **Thakkar**	Centre for Addiction and Mental Health (Canada)	Research analyst	♀	Co-author of the epidemiology sections of the Pre-review (40th meeting) and Critical-review (41st meeting) reports on all substances, except CBD
Agnes **Vitry**	University of South Australia (Australia)	Professor, School of Pharmacy and Medical Sciences	♀	Temporary adviser at the 41st meeting
Sharon L. **Walsh**	Center on Drug and Alcohol Research, University of Kentucky (United States)	Professor of Behavioral Science; Director, Center on Drug and Alcohol Research	♀	Lead co-editor of the Critical review report on CBD (40th meeting)
Jenny **Wiley**	RTI International (United States)	Fellow, Behavioral Pharmacology	♀	Temporary adviser at the 40th meeting. Author of the pharmacology sections of the Pre-review (40th meeting) and Critical-review (41st meeting) reports on all substances, except CBD
Kim **Wolff**	King's College (United Kingdom)	Director, Department of Analytical, Forensic and Addiction Science	♀	Temporary adviser at the 41st meeting
World Health Organization staff[c]				
Tedros **Adhanom Ghebreyesus**	Office of the Director-General, WHO	Director-General	♂	No participation in the meetings. Circulated ECDD final reports and recommendations to United Nations Secretary-General
Alma **Alic**	Office of Compliance, Risk Management and Ethics, WHO	Ethics officer	♀	
Wil **De Zwart**	*Cluster* Access to Medicines, Vaccines and Pharmaceuticals, WHO. ECDD Secretariat	Technical officer to the ECDD Secretariat	♀	Co-editor of the Pre-review (40th meeting) and Critical-review (41st meeting) reports on all substances, except CBD
Gilles Bernard **Forte**	*Cluster* Access to Medicines, Vaccines and Pharmaceuticals, WHO. ECDD Secretariat	Coordinator; Secretary of the Expert Committee on Drug Dependence	♂	Central coordination and oversight of the three meetings
Suzanne **Hill**	*Department* Essential Medicines and Health Products, WHO	Director	♀	Oversight of the three meetings
Stephanie **Kershaw**	*Department* Essential Medicines and Health Products, WHO	Technical officer	♀	Co-author of the Pre-review report on CBD (39th meeting). Co-author of the analysis of answers to the questionnaire to Member States for the 39th meeting (CBD).

Eda **Lopato**	*Department* Essential Medicines and Health Products, WHO	Technical officer	♀	Until 2017. Did not participate in the 39th, 40th and 41st meetings
Dilkushi **Poovendran**	*Cluster* Access to Medicines, Vaccines and Pharmaceuticals, WHO. ECDD Secretariat	Technical officer	♀	Co-author of the Pre-review report on CBD (39th meeting). Co-author of the analysis of answers to the questionnaire to Member States for the 39th meeting (CBD). Co-editor of the Pre-review (40th meeting) and Critical-review (41st meeting) reports on all substances, except CBD.
Vladimir **Poznyak**	*Department* Mental health and Substance Abuse, WHO	Coordinator	♂	Liaison with WHO's work on the "non-medical uses of cannabis"
Jakob **Quirin**	Office of the Legal Counsel, WHO	Associate Legal Officer	♂	
Mariângela Batista Galvão **Simão**	*Cluster* Access to Medicines, Vaccines and Pharmaceuticals, WHO	Cluster Head; Assistant Director-General	♀	Oversight of the process; liaison with Director-General.
Presenters on cannabis at ECDD Open Sessions[d]				
Boris **Banas**	European Industrial Hemp Association (Germany)		♂	Open session of the 39th meeting
Myrtle **Clarke**	Fields of Green for ALL (South Africa)		♀	Open session of the 40th meeting
Leticia **Cuñetti**	Nephrology and Urology Institute (Uruguay)		♀	Open session of the 40th meeting
Francis **D'Ambrosio**	D'Ambrosio Medical Group (United States)		♂	Open session of the 41st meeting
Richard **Dart**	Rocky Mountain Poison & Drug Center (United States)		♂	Open session of the 41st meeting
Raúl Héctor **Elizalde Garza**	Por Grace (Mexico)		♂	Open session of the 39th meeting
Margarita **Garfias** and her son	Familias y Retos Extraordinarios, AC (Mexico)		♀	Open session of the 40th meeting
Franjo **Grotenhermen**	International Association for Cannabinoid Medicines (Germany)		♂	Open session of the 40th meeting
Christopher **Hallam**	IDPC (United Kingdom)		♂	Open session of the 41st meeting
Jennifer **Hasselgard-Rowe**	IDPC (United Kingdom)		♀	Open session of the 40th meeting
Harm **Hids**	Chron Consult (Netherlands)		♂	Open session of the 40th meeting
Catherine **Jacobson**	Tilray, Inc. (Canada/United States)		♀	Open session of the 40th meeting
Michael A. **Krawitz**	Veterans for Medical Cannabis Access; FAAAT think & do tank (United States)		♂	Open sessions of the 37th and 39th meetings
Pritesh **Kumar**	PhytoSciences (United States)		♂	Open session of the 40th meeting
Shane **Le Brun**	Medical Cannabis Awareness (New Zealand)		♂	Open session of the 40th meeting
Koichi **Maeda**	Japan Medical Marijuana Association (Japan)		♂	Open session of the 41st meeting
Sylvie **Massart**	n/a		♀	Open session of the 40th meeting
Dusan **Nolimal**	Institute of Public Health (Slovenia)		♂	Open session of the 39th meeting
Marie **Nougier**	IDPC (United Kingdom)		♀	Open session of the 39th meeting
David J. **Nutt**	Drug Science (United Kingdom)		♂	Open session of the 38th meeting
Gabriel **Rada**	Epistemonikos Foundation (Chile)		♂	Open session of the 40th meeting
Kenzi **Riboulet-Zemouli**	FAAAT think & do tank (Spain)		♂	Open session of the 41st meeting
Valeria **Salech**	Mamá Cultiva (Argentina)		♀	Open session of the 40th meeting
Tadhg **Stopford**	The Hemp Foundation (New Zealand)		♂	Open session of the 40th meeting
Zara **Snapp**	Instituto RIA (Mexico)		♀	Open session of the 40th meeting
Luciana **Zaffalon**	Brazilian Drug Policy Platform (Brazil)		♀	Open session of the 41st meeting

[a] Participated in the ECDD meetings indicated; [b] Did not participate in ECDD meetings except when noted as "Temporary adviser"; [c] Presented orally at the Open session where indicated, but did not participate in the rest of the ECDD meetings.

Annex II. List of stakeholders involved in the review of WHO ECDD's cannabis-related recommendations at the Commission on Narcotic Drugs, in Vienna (2019-2021).

Stakeholder	Body (country)	Title	Gender	Involvement
Bureau of the Commission on Narcotic Drugs				
Maria Assunta **Accili Sabbatini**	Permanent Mission of Italy to international organizations in Vienna	Ambassador	♀	3rd Vice-Chair of the 62nd CND (2019)
Mirghani Abbaker Altayeb **Bakhet**	Permanent Mission of Sudan to international organizations in Vienna	Ambassador	♂	Chair of the 62nd CND (2019)
Wolfgang Amadeus **Bruelhart**	Permanent Mission of Switzerland to international organizations in Vienna	Ambassador	♂	2nd Vice-Chair of the 63rd CND (after 11 June 2020)[a]
Ghislain **D'hoop**	Permanent Mission of Belgium to international organizations in Vienna	Ambassador	♂	2nd Vice-Chair of the 63rd CND (until 11 June 2020)[a]
Kazem **Gharib Abadi**	Permanent Mission of Iran to international organizations in Vienna	Ambassador	♂	1st Vice-Chair of the 62nd CND (2019)
Mansoor Ahmad **Khan**	*Until September 2020:* Permanent Mission of Pakistan to international organizations in Vienna *Until September 2020:* Embassy of Pakistan in Kabul, Afghanistan	Ambassador	♂	Chair of the 63rd CND (2020)
Dominika **Krois**	Permanent Mission of Poland to international organizations in Vienna	Ambassador	♀	1st Vice-Chair of the 63rd CND (2020)
Dubravka Plejic **Markovic**	Permanent Mission of Croatia to international organizations in Vienna	Ambassador	♀	2nd Vice-Chair of the 62nd CND (2019)
Gloria **Navarrete**	Permanent Mission of Chile to international organizations in Vienna	Ambassador	♀	3rd Vice-Chair of the 63rd CND (2020)
Emmanuel Ikechukwu **Nweke**	Permanent Mission of Nigeria to international organizations in Vienna	Counsellor	♂	Rapporteur of the 63rd CND (2020)
Alvaro **Salcedo Teullet**	Permanent Mission of Peru to international organizations in Vienna	First Secretary	♂	Rapporteur of the 62nd CND (2019)
Secretariat to the Commission on Narcotic Drugs				
John **Brandolino**	Division for Treaty Affairs, UNODC	Director	♂	Oversight
Jo **Dedeyne-Amann**	Secretariat to the Commission on Narcotic Drugs, Division for Treaty Affairs, UNODC	Chief	♀	Coordination; focal point.
António **Guterres**	United Nations	Secretary-General	♂	No participation in the Commission. Circulated to Member States the notification of WHO's Director-General containing ECDD final reports and recommendations, and the outcome of the vote of the reconvened 63rd CND session
Presenters at the Topical meetings of the 63rd the Commission on Narcotic Drugs				
Undocumented	An unknown number of experts invited by governments presented during the Topical meetings (an important part of these *experts* were representatives of governmental medicines, pharmaceutical, law enforcement, or drug control agencies).			

[a] CND, 2020b, p.24.

Annex III. Comprehensive chronology of the WHO ECDD's cannabis review process, in Geneva, New-york and Vienna (2016-2021)*

Date	Body	Event	Access to observers	Decision/action	Documentation
14 November 2016	ECDD	38th meeting, open session	Open	Presentation of oral and written contribution by pre-registered civil society stakeholders.	Curran et al., 2016
14 to 18 November 2016	ECDD	38th meeting	Closed	"...the Committee noted that the current Schedule I of the 1961 Convention groups together cannabis and cannabis resin, extracts and tinctures of cannabis. Cannabis plant and cannabis resin are also in Schedule IV of the 1961 Convention. The Committee further noted that there are natural and synthetic cannabinoids in Schedule I and Schedule II of the 1971 Convention. The committee recognized: - An increase in the use of cannabis and its components for medical purposes - The emergence of new cannabis-related pharmaceutical preparations for therapeutic use - Cannabis has never been subject to a formal pre-review or critical review by the ECDD. The Committee requested that the Secretariat prepare relevant documentation in accordance with the Guidance on the WHO review of psychoactive substances for international control in order to conduct pre-reviews for the following substances: - Cannabis plant and cannabis resin - Extracts and tinctures of cannabis - Delta-9-tetrahydrocannabinol (THC) - Cannabidiol (CBD) - Stereoisomers of THC. The Committee recommended that these pre-reviews be evaluated at a specific ECDD meeting dedicated to cannabis and its component substances to be held within the next eighteen months from the 38th meeting. The purpose of the pre-review is to determine whether current information justifies an Expert Committee critical review. The categories of information for evaluating substances in pre-reviews are identical to those used in critical reviews. The pre-review is a preliminary analysis, and findings at this stage should not determine whether the control status of a substance should be changed."[xb]	Outcome report, 38th ECDD: WHO, 2017b, pp.35–36.
2 December 2016	CND	Reconvened 59th session	Open	Presentation of an excerpt from the Report of the 38th ECDD to CND members and observers, byECDD Secretariat (Dr. G. Forte, Dr. E. Lopato).	Agenda: CND, 2016a, p.8. Conference room paper: WHO, 2016c, pp.7–8.
8 to 10 May 2017	ECDD	2nd Informal Working Group	Closed	Eee	Minutes: WHO, 2018c, pp.10–11
6 Novembre 2017	ECDD	39th meeting, open session	Open	Presentation of oral and written contribution by pre-registered civil society stakeholders.	Open session agenda: WHO, 2017a.
6 to 10 Novembre 2017	ECDD	39th meeting	Closed	*Pre-review of CBD:* "In a variety of laboratory animal and human models, preparations containing almost exclusively CBD do not have effects typical of abuse potential. In animals, CBD increases intracranial self-stimulation thresholds, suggestive of diminished reward activity, and does not produce conditioned place preference. Importantly, it has placebo-like effects when tested for its abuse liability in human subjects. Furthermore, CBD does not have effects characteristic of THC. It does not produce the cannabimimetic effects in the tetrad battery in mice, and does not substitute for the discriminative stimulus effects of THC in rats. At present, there are no case reports of abuse or dependence relating to the use of CBD. Furthermore, no public health problems (e.g. impaired driving) have been associated with the use of CBD. CBD is not specifically listed in the schedules of the 1961, 1971 or 1988 United Nations International Drug Control Conventions. There is no evidence that CBD as a substance is liable to similar abuse and produces similar ill effects to substances in the 1961 or 1971 Conventions (including cannabis and dronabinol (THC), respectively). The purpose of the pre-review was to determine whether current information justifies a critical review by the Expert Committee of information that may justify the	Pre-review report: Walsh et al., 2017. Outcome report, 39th ECDD: WHO, 2018c.

				scheduling or a change in the scheduling of the substance in the 1961 or 1971 Conventions. As CBD is not currently a scheduled substance in its own right (only as a component of cannabis extracts), current information does not justify a change in this scheduling status nor does it justify scheduling of the substance. However, where CBD is produced for pharmaceutical purposes as an extract of cannabis, cannabis extracts and tinctures are included in the 1961 UN Single Convention on Narcotic Drugs. The pre-review of cannabis extracts and tinctures will take place at the fortieth ECDD meeting in May 2018. Therefore it is also recommended that extracts or preparations containing almost exclusively CBD (cannabidiol; (1'R,2'R)-5'-Methyl-4-pentyl-2'-(prop-1-en-2-yl)-1',2',3',4'-tetrahydro-[1,1'-biphenyl]-2,6-diol) be subject to critical review at that meeting."	
9 November 2017	WHO EMP		n/a	Requests for proposals for Author contributions to the 40th ECDD meeting, by providing a total of 20 Pre-Review reports of Cannabis-Related Substances (five scientific topics: chemistry, pharmacology, toxicology, epidemiology, and therapeutic use, for each substance under review: "cannabis and cannabis resin," "extracts and tinctures of cannabis," "delta-9-THC," and "isomers of THC")	RfP: United Nations Global Marketplace, 2017; WHO, 2016e.
Early 2018	WHO	n/a	n/a	Circulation of Questionnaires to collect data from Member States on "cannabis and cannabis resin," "extracts and tinctures of cannabis," "delta-9-THC," "isomers of THC," and "cannabidiol."	Questionnaires: WHO, 2018e
4 June 2018	ECDD	40th meeting, open session	Open	Presentation of oral and written contribution by pre-registered civil society stakeholders.	Open session agenda: WHO, 2018a. Report: WHO, 2018d, pp.6–8.
4 to 7 June 2018	ECDD	40th meeting	Closed	*Critical review of CBD:* "CBD is one of the naturally occurring cannabinoids found in cannabis plants. There are no case reports of abuse or dependence relating to the use of pure CBD. No public health problems have been associated with CBD use. CBD has been found to be generally well tolerated and to have a good safety profile. Adverse effects of CBD use include loss of appetite, diarrhoea and fatigue. Therapeutic applications of CBD are being researched for a variety of clinical uses. Research in this area is most advanced in the treatment of epilepsy. In clinical trials, one pure CBD product has demonstrated effectiveness for treating some forms of epilepsy, such as Lennox-Gastaut syndrome and Dravet syndrome, which are often resistant to other forms of medication. CBD is not specifically listed in the schedules of the 1961, 1971 or 1988 United Nations International Drug Control Conventions. However, if prepared as an extract or tincture, it is controlled under Schedule I of the 1961 Single Convention on Narcotic Drugs. There is no evidence that CBD as a substance is liable to similar abuse or leads to similar ill-effects to substances controlled under the 1961 or 1971 Conventions such as cannabis or Δ9 -THC, respectively. The Committee recommended that preparations considered to be pure CBD should not be scheduled." *Pre-review of cannabis and cannabis resin:* "Cannabis is defined as the flowering tops or separated resin of the C. sativa plant. Cannabis contains 121 reported phytocannabinoids, the most prominent being Δ9 -THC and CBD. Δ9 -THC is thought to be the principal intoxicant constituent of cannabis. When used acutely, cannabis causes adverse effects such as dizziness and impairment of motor control and cognitive function. Cannabis use can impair driving. There are particular risks reported for children, such as respiratory depression, tachycardia and coma. The adverse effects of cannabis consumption are similar to those produced by Δ9 -THC alone. Most of the adverse effects associated with cannabis result from chronic use. Regular cannabis use is associated with increased risk of mental health disorders such as anxiety, depression and psychotic illness. Chronic regular cannabis use is particularly problematic for young people as a result of its effects on the developing brain. Cannabis can cause physical dependence in humans as evidenced by the onset of cannabis withdrawal symptoms upon abstinence. Withdrawal symptoms include mood changes, irritability and sleep impairment. Clinical diagnostic guidelines such as DSM-5 and ICD-10 recognize cannabis use disorder. The Committee considered information regarding the therapeutic indications of cannabis and ongoing research into its possible medical applications. Several countries permit the use of cannabis for the treatment of medical conditions such as back pain, sleep disorders, depression, post-injury pain and multiple sclerosis. Cannabis plant and cannabis resin are included in Schedule I and Schedule IV of the 1961 Single Convention on Narcotic Drugs. Substances that are included in both these schedules are particularly liable to abuse and to produce ill-effects. Other substances that	Critical review report on CBD: Walsh et al., 2018. Pre-review reports on cannabis and cannabis resin: Cannazza and Citti, 2018a; Wiley, 2018a; Arnold, 2018a; Hill et al., 2018a; Rehm et al., 2018a; Expert Peer Review 1, 2018a; Expert Peer Review 2, 2018a. Pre-review reports on extracts and tinctures: Cannazza and Citti, 2018b; Wiley, 2018b; Arnold, 2018b; Hill et al., 2018b; Rehm et al., 2018b; Expert Peer Review 1, 2018b; Expert Peer Review 2, 2018b. Pre-review reports on delta-9-THC: Cannazza and Citti, 2018c; Wiley, 2018c; Arnold, 2018c; Hill et al., 2018c; Rehm et al., 2018c; Expert Peer Review 1, 2018c; Expert Peer Review 2, 2018c. Pre-review reports on THC isomers: Cannazza and Citti, 2018d; Wiley, 2018d; Arnold, 2018d; Hill et al., 2018d; Rehm et al., 2018d; Expert Peer Review 1, 2018d; Expert Peer Review 2, 2018d. Outcome report, 40th ECDD: WHO, 2018d.

are included in both Schedules I and IV are fentanyl analogues and other opioids that are considered especially dangerous. The evidence presented to the Committee did not indicate that cannabis plant and cannabis resin were liable to produce ill-effects similar to the other substances in Schedule IV of the 1961 Convention on Narcotic Drugs. The inclusion of cannabis and cannabis resin in Schedule IV may not be consistent with the criteria for inclusion in Schedule IV. The Committee concluded that there is sufficient evidence to recommend a critical review of cannabis plant and cannabis resin at a future ECDD meeting and to explore further the appropriateness of their current scheduling within the 1961 Convention."

Pre-review of extracts and tinctures of cannabis: "Extracts and tinctures of cannabis are substances that have been extracted from the C. sativa plant. They include cannabis oils, teas and an extract with approximately equal quantities of Δ9 -THC and CBD. These substances can be administered through various routes including orally and by smoke inhalation. Evidence on the dependence potential of extracts and tinctures of cannabis varies by substance. There are no published studies that have evaluated the dependence potential of mixtures of Δ9 -THC and CBD, but there is limited evidence of a withdrawal syndrome upon abrupt cessation (for example, sleep disruption and mood changes). Frequent use of the BHO extract has been associated with physical dependence. The psychoactive constituent, Δ9 -THC, present in most extracts has been separately studied and has been shown to have dependence potential. Few published studies have evaluated the abuse potential of cannabis extracts in animals or humans. There are, however, studies that have investigated the abuse potential of various components of extracts and tinctures of cannabis. While particular components, such as Δ9 -THC, have demonstrated abuse potential, other components in these preparations, such as CBD, have not. The Committee recognized that the term "extracts and tinctures" as cited in the 1961 Single Convention on Narcotic Drugs encompasses preparations that have psychoactive properties as well as those that do not. The Committee also recognized that the psychoactive properties of these preparations are due principally to Δ9 -THC, which is currently scheduled in the 1971 Convention on Psychotropic Substances. Among the substances that are not psychoactive in the preparations that are derived as extracts or tinctures of cannabis are some that have promising therapeutic indications, such as CBD. Cannabis extracts and tinctures are placed in Schedule I of the 1961 Single Convention on Narcotic Drugs. The Committee noted that the category "extract and tinctures of cannabis" encompasses very diverse formulations with varying ratios of cannabis components, in particular Δ9 -THC, and with or without psychoactive properties. The Committee therefore concluded that there is sufficient information to recommend a critical review of extracts and tinctures of cannabis at a future ECDD meeting to address the necessity of continuing to include the term "extracts and tinctures of cannabis" in the 1961 Convention."

Pre-review of delta-9-THC: "Δ9 -tetrahydrocannabinol (Δ9 -THC) refers to four stereoisomers of Δ9 -THC. One of these stereoisomers is found in the cannabis plant and is also known by the INN dronabinol; it has recognized therapeutic uses. Chronic administration of Δ9 -THC can induce physical dependence in laboratory animals and in humans. This has been demonstrated by the presence of withdrawal effects in animals and human subjects. The subjective effects of Δ9 -THC when administered orally resemble those of cannabis. However, there is little evidence that oral Δ9 -THC is used for non-medical purposes so as to cause a public health problem. Δ9 -THC (dronabinol) has approval in a number of countries for therapeutic indications including anorexia associated with weight loss in patients with AIDS and for nausea and vomiting associated with cancer chemotherapy. Δ9 -THC (dronabinol) is routinely administered orally. Δ9 -THC and its stereoisomers are listed in Schedule II of the Convention on Psychotropic Substances of 1971. In previous ECDD reviews, Δ9 -THC, and especially dronabinol, had been considered in a synthetic form as a pharmaceutical preparation. However, the Committee recognized that Δ9 -THC, in particular, its active and naturally occurring stereoisomer, dronabinol, today also refers to the main psychoactive component of cannabis and cannabis-derived psychoactive products. In this form, dronabinol produces similar ill-effects, dependence and abuse potential to cannabis, which is placed under the 1961 Single Convention. A substance liable to similar abuse and productive of similar ill-effects to those of a substance already scheduled within the 1961 Convention would normally be scheduled in the same way as that substance. The Committee concluded that there is sufficient information to recommend a critical review of Δ9 -THC at a future ECDD meeting in order to address the

				appropriateness of its placement within the Conventions." *Pre-review of Tetrahydrocannabinol (Isomers of THC):* "There are currently six isomers of THC listed in Schedule I of the 1971 Convention. Of the six THC isomers reviewed here, the abuse potential of only two, Δ8 -THC and Δ6a,10a-THC, have been evaluated in a few human studies. These studies found that the acute intoxicating effects of these substances are similar to those of Δ9 - THC, but they are less potent. There are no reports that THC isomers induce physical dependence. There are no reported medical or veterinary uses of these isomers. There is no evidence that any of these listed isomers are being abused or are likely to be abused so as to constitute a public health or social problem. However, the Committee noted the potential difficulty of differentiating these six isomers (listed in Schedule I of the 1971 Convention) from Δ9 -THC (listed in Schedule II of the 1971 Convention) using standard methods of chemical analysis owing to their chemical similarities. The Committee further noted that this is an important factor to consider in the scheduling of these isomers. The Committee concluded that there is sufficient information to recommend a critical review of the isomers of THC at a future ECDD meeting and to explore further the relevance of their current scheduling within the 1971 Convention."	
23 July 2018	WHO Director General	n/a	n/a	Circulation of a Notification containing the outcome of the Critical review of CBD and of the Pre-reviews of "cannabis," "cannabis resin," "extracts and tinctures of cannabis," "delta-9-THC," "isomers of THC," and "CBD preparations," undertaken at the 40th ECDD meeting.	Adhanom Ghebreyesus, 2018; CND, 2019a, p.3.
29 August 2018	UN Secretary General	n/a	n/a	Circulation of a Note Verbale to Member States, containing the Notification from WHO Director-General dated 23 July 2018.	CND, 2019a, p.3.
12 Novembre 2018	ECDD	41st meeting, open session	Open	Presentation of oral and written contribution by pre-registered civil society stakeholders.	Report: WHO, 2019a, pp.1–3.
12 to 16 Novembre 2018	ECDD	41st meeting	Closed	*Critical review of cannabis and cannabis resin:* "The Committee recommended that cannabis and cannabis resin be deleted from Schedule IV of the 1961 Single Convention on Narcotic Drugs. " *Critical review of delta-9-tetrahydrocannabinol (Δ9 -THC; dronabinol):* " The Committee recommended that dronabinol and its stereoisomers (delta-9- tetrahydrocannabinol) be added to Schedule I of the 1961 Single Convention on Narcotic Drugs. As indicated in the Guidance on the WHO review of psychoactive substances for international control, to facilitate efficient administration of the international control system, it is not advisable to place a substance under more than one Convention. Accordingly: The Committee recommended the deletion of dronabinol and its stereoisomers (delta-9-tetrahydrocannabinol) from the 1971 Convention on Psychotropic Substances, Schedule II, subject to the Commission's adoption of the recommendation to add dronabinol and its stereoisomers (delta-9- tetrahydrocannabinol) to Schedule I of the 1961 Single Convention on Narcotic Drugs." *Critical review of Tetrahydrocannabinol (isomers of THC):* "The Committee recommended that tetrahydrocannabinol (understood to refer to the six isomers currently listed in Schedule I of the 1971 Convention on Psychotropic Substances) be added to Schedule I of the 1961 Single Convention on Narcotic Drugs, subject to the Commission's adoption of the recommendation to add dronabinol (delta-9- tetrahydrocannabinol) to Schedule I of the 1961 Single Convention on Narcotic Drugs. As indicated in the Guidance on the WHO review of psychoactive substances for international control, to facilitate efficient administration of the international control system, it is not advisable to place a substance under more than one Convention. The Committee recommended that tetrahydrocannabinol (understood to refer to the six isomers currently listed in Schedule I of the 1971 Convention on Psychotropic Substances) be deleted from the 1971 Convention on Psychotropic Substances, subject to the Commission's adoption of the recommendation to add tetrahydrocannabinol to Schedule I of the 1961 Single Convention on Narcotic Drugs." *Critical review of Extracts and tinctures of cannabis:* "The Committee recommended deleting "extracts and tinctures of cannabis" from Schedule I of the 1961 Single Convention on Narcotic Drugs. The Committee acknowledged that the fact that diverse preparations with a variable concentration of Δ9 -THC are controlled within the same entry "extract and tinctures" under the same Schedule, is a challenge for	Critical review reports on cannabis and cannabis resin: Poovendran and De Zwart, 2018a. Critical review reports on extracts and tinctures: Poovendran and De Zwart, 2018b. Critical review reports on delta-9-THC: Poovendran and De Zwart, 2018c. Critical review reports on THC isomers: Poovendran and De Zwart, 2018d. Outcome report, 41st ECDD: WHO, 2019a.

				the authorities responsible for implementing control measures in their respective countries." *Critical review of cannabidiol preparations:* "The Committee recommended that a footnote be added to Schedule I of the 1961 Single Convention on Narcotic Drugs to read: 'Preparations containing predominantly cannabidiol and not more than 0.2 per cent of delta-9-tetrahydrocannabinol are not under international control.'" *Critical review of pharmaceutical preparations of cannabis and delta-9-tetrahydrocannabinol (dronabinol):* "The Committee recommended that preparations containing delta-9-tetrahydrocannabinol (dronabinol), produced either by chemical synthesis or as a preparation of cannabis, that are compounded as pharmaceutical preparations with one or more other ingredients and in such a way that delta-9-tetrahydrocannabinol (dronabinol) cannot be recovered by readily available means or in a yield which would constitute a risk to public health, be added to Schedule III of the 1961 Convention on Narcotic Drugs."	
24 January 2019	WHO Director General	n/a	n/a	Circulation of a Notification containing the outcome of the Critical reviews of "cannabis," "cannabis resin," "extracts and tinctures of cannabis," "delta-9-THC," "isomers of THC," and "CBD preparations," undertaken at the 41st ECDD meeting.	Adhanom Ghebreyesus, 2019; CND, 2020c, p.1,5–10.
29 January 2019				"[Informal circulation of] the notification and the information submitted by WHO in support of those recommendations to all permanent missions to the United Nations in Vienna"	CND, 2020c, p.2.
1 February 2019	UN Secretary General	n/a	n/a	Circulation of a Note Verbale to Member States, containing the Notification from WHO Director-General dated 24 January 2019.	CND, 2020c, p.2.
18, 20 and 21 March 2019	CND Extended Bureau	Meetings	Closed	Meeting "to consider matters related to the organization of work."	CND, 2019b, p.78
19 March 2019	CND	62nd session (9th meeting)	Open	Adoption of *Decision 62/14:* "The Commission on Narcotic Drugs [...] decided to postpone the voting on the recommendations of the World Health Organization regarding the critical review of cannabis and cannabis-related substances, which were transmitted to the Secretary-General after the three-month period established pursuant to Commission resolution 2 (S-VII) of 8 February 1982 [...] in order to provide States with more time to consider the recommendations."	Background note: CND, 2019a. Report: CND, 2019b, pp.39,62
24 June 2019	CND	62nd session, 4th intersessional meeting	Open	Discussion of all recommendations, on the basis of the questions submitted by Member States to WHO, INCB and the UNODC Division for Treaty Affairs during the first half of 2019	CND, 2020c, p.2; 2020f; UNODC, 2019.
23 Septembre 2019	CND	62nd session, 5th intersessional meeting	Open	Discussion of all recommendations, on the basis of the complementary questions submitted by Member States to WHO, INCB and the UNODC Division for Treaty Affairs during summer 2019. Member States agree to continue discussions during the reconvened 62nd session.	CND, 2020c, p.2; 2020f; UNODC, 2019.
12 December 2019	CND	Reconvened 62nd session	Open	Discussions of the recommendations under agenda item 9.	CND, 2020c, p.3.
11 February 2020	United Nations Office of Legal Affairs	n/a	n/a	Circulation of an *Interoffice memorandum* answering to "questions posed by the extended Bureau." Among others, the Office of Legal Affairs "explained that the CND may decide to deviate from the default procedure "voting on each recommendation separately", i.e. the Commission could vote jointly on two or more recommendations, if it decides to do so" that "a procedural decision would be required before the actual vote on the scheduling recommendation" and "that it was up to the Commission to decide on the majority required, in the case a recommendation under the 1961 Convention was voted on jointly with a recommendation under the 1971 Convention."	Facsimile…, 2020, pp.6–13,18
17 February 2020	CND	63rd session, 1st intersessional meeting	Open	Discussions of the recommendations and of the opportunity to vote during the 63rd session.	
28 February 2020, p.m.	CND	63rd session, informal pre-session consultations	Closed	Pre-agreement by consensus on the draft of CND Decision 63/14 (Draft decision L.8)	CND, 2020e.
3 and 5 March 2020	CND Extended	Meetings	Closed	Meeting "to consider matters related to the organization of work."	CND, 2020a, p.56.

	Bureau				
4 March 2020	CND	63rd session (6th meeting)	Open	Adoption of *Decision 63/14:* "The Commission on Narcotic Drugs [...] recalled its mandate to vote on scheduling recommendations as laid out in the international drug control conventions and decided to continue during its current sixty-third session the consideration of the recommendations of the World Health Organization on cannabis and cannabis-related substances, bearing in mind their complexity, in order to clarify the implications and consequences of, as well as the reasoning for, these recommendations, and decided to vote at its reconvened sixty-third session in December 2020, in order to preserve the integrity of the international scheduling system."	Background note: CND, 2020g. Comments by countries: CND, 2020d. Report: CND, 2020a, pp.24,40.
24 and 30 April 2020	CND Extended Bureau	Meetings (8th and 9th)	Closed	Consideration of the "first version of the Chair's proposal" (regarding voting procedures for the reconvened 63rd session.	Facsimile…, 2020, p.44.
May/June 2020	CND Extended Bureau	Meetings (10th and 11th)	Closed	Discussion on the organization and procedures for the topical meetings.	Facsimile…, 2020, p.48.
24 June 2020	CND	1st Topical meeting (day 1)	Closed	Discussion of Recommendation 5.4 "conducted virtually"	CND, 2020c, p.3; CNDmonitor, 2020; Facsimile…, 2020; UNODC, 2020e.
25 June 2020	CND	1st Topical meeting (day 2)	Closed	Discussion of Recommendation 5.5 "conducted virtually"	CND, 2020c, p.3; CNDmonitor, 2020; Facsimile…, 2020; UNODC, 2020e.
5 August 2020	WHO Director General	n/a	n/a	Circulation of a Notification containing terminological precisions concerning the wording on recommendation 5.6.	CND, 2020c, pp.4,11–12.
Unknown	UN Secretary General	n/a	n/a	Circulation of a Note Verbale to Member States, containing the Notification from WHO Director-General dated 5 August 2020.	CND, 2020c, pp.11–12.
24 August 2020	CND	2nd Topical meeting (day 1)	Closed	Discussion of Recommendations 5.2 and 5.3 "conducted virtually"	CND, 2020c, p.3; CNDmonitor, 2020; Facsimile…, 2020; UNODC, 2020e.
25 August 2020	CND	2nd Topical meeting (day 2)	Closed	Discussion of Recommendation 5.6 "conducted virtually"	CND, 2020c, p.3; CNDmonitor, 2020; Facsimile…, 2020; UNODC, 2020e.
Unknown	CND Extended Bureau	Meetings	Closed	Meeting "to consider matters related to the organization of work."	*Undocumented*
6 October 2020	CND	3rd Topical meeting	Closed	Discussion of Recommendation 5.1 "conducted virtually" and "attended by over 600 participants from more than 100 Member States"	CND, 2020c, p.3; CNDmonitor, 2020; Facsimile…, 2020; UNODC, 2020e.
7 October 2020	United Nations General Assembly	Third Committee	Closed	Virtual Briefing by CND Bureau to share information "on the work undertaken by the Commission at its 63rd session, including related to its normative functions under the three international drug control conventions" with the UN General Assembly's Third Committee.	UNODC, 2020e, p.2
8 October 2020	CND	63rd session, 2nd intersessional meeting	Open	"Member States had the opportunity to recapitulate relevant arguments and sum up their positions and, in addition, other stakeholders shared their views"	CND, 2020c, p.3; UNODC, 2020f
Unknown	CND Extended Bureau	Meetings	Closed	Meeting "to consider matters related to the organization of work."	*Undocumented*
2 December 2020	CND	Reconvened 63rd session	Open	Adoption of *Decision 63/16:* "Voting procedure on the scheduling recommendations of the World Health Organization (Expert Committee on Drug Dependence) on cannabis and cannabis-related substances at the reconvened sixty-third session of the Commission on Narcotic Drugs" by consensus. Adoption of *Decision 63/17:* "Deletion of cannabis and cannabis resin from Schedule IV of the Single Convention on Narcotic Drugs of 1961 as amended by the 1972 Protocol" adopted by a "roll-call vote of 27 votes to 25, with 1 abstention." Adoption of *Decision 63/18:* "Consideration of a proposal from the World Health Organization to add dronabinol and its stereoisomers (delta-9-tetrahydrocannabinol) to Schedule I of the Single Convention on Narcotic Drugs of 1961 as amended by the 1972 Protocol" rejected by "a	Background note: CND, 2020c. Report: CND, 2020b Decisions: CND, 2020b, pp.3–7 Documentation: UNODC, 2020g Explanations of vote: CND, 2020h. Votes: Tables 1 and 2.

				roll-call vote of 23 votes to 28, with 2 abstentions." Adoption of *Decision 63/19:* "Consideration of a proposal from the World Health Organization to delete extracts and tinctures of cannabis from Schedule I of the Single Convention on Narcotic Drugs of 1961 as amended by the 1972 Protocol" rejected by "a roll-call vote of 24 votes to 27, with 2 abstentions." Adoption of *Decision 63/20:* "Consideration of a proposal from the World Health Organization to add a footnote to the entry for cannabis and cannabis resin in Schedule I of the Single Convention on Narcotic Drugs of 1961 as amended by the 1972 Protocol to read 'Preparations containing predominantly cannabidiol and not more than 0.2 per cent of delta-9-tetrahydrocannabinol are not under international control'" rejected by "a roll-call vote of 6 votes to 43, with 4 abstentions." Adoption of *Decision 63/21:* "Consideration of a proposal by the World Health Organization to add to Schedule III of the Single Convention on Narcotic Drugs of 1961 as amended by the 1972 Protocol preparations containing delta-9-tetrahydrocannabinol (dronabinol), produced either by chemical synthesis or as preparations of cannabis, that are compounded as pharmaceutical preparations with one or more other ingredients and in such a way that delta-9- tetrahydrocannabinol (dronabinol) cannot be recovered by readily available means or in a yield that would constitute a risk to public health" not submitted to a vote.	
21 January 2021	UNODC, on behalf of United Nations Secretary General	Circular Letter	n/a	Communication of t"he texts of CND decisions 63/17, 63/18, 63/19, 63/20, and 63/21 on the scheduling recommendations of the WHO ECDD on cannabis and cannabis-related substances, taken at the Commission's reconvened sixty-third session on 2 December 2020." "In accordance with article 3, paragraph 7, of the Single Convention on Narcotic Drugs of 1961 as amended by the 1972 Protocol, decision 63/17 shall become effective with respect to each Party on the date of its receipt of the present notification, and the Parties shall thereupon take such action as may be required under this Convention" However, Article 3(8) allows for a period of opposition of 90 days.	United Nations Secretariat, 2021.
22 January 2021	CND Secretariat	n/a	n/a	Publication of the updated Schedules of the 1961 Convention.	CND, 2021c.
21 April 2021	n/a			Definitive entry into force of Decision 63/17, after no opposition was expressed during the 90 days period. "Scheduling decisions under the international drug control conventions are subject to review by the Economic and Social Council upon the request of any State party. The request for review must be filed within 90 days of receipt of notification of the decision [...]. The Council may confirm, alter or reverse the decision of the Commission, and the decision of the Council is final."	UNODC, 2020a, p.7.

* A detailed timeline covering the previous period (1952–2018) can be consulted in the Crimson Digest volume 1 (Riboulet-Zemouli et al, 2018, pp.37–44).

On 21 April 2021, the herbal medicines “cannabis” and “cannabis resin” definitively ceased to appear in Schedule IV of the 1961 Single Convention on narcotic drugs (C61), where they had been listed since the entry into force of that treaty in 1964.

The process to scientifically review and reschedule *Cannabis*-related controlled drugs had been launched by the World Health Organization (WHO) on 2 December 2016 and went through a number of hindrances until it finally got submitted to a *sui generis* voting process on 2 December 2020 at the United Nations Commission on narcotic drugs (CND).

This report reviews the scientific assessments of *Cannabis*-related controlled drugs and cannabidiol (CBD) by the WHO’s Expert Committee on Drug Dependence (ECDD) and subsequent political discussions at CND that culminated with the 2 December 2020 vote, changing the scheduling of “cannabis” and “cannabis resin” under the C61. A digest of the four years of proceedings is presented, showcasing elements that provide an understanding about the length and complexity of the processes involved. The report introduces previously-unpublished minutes, complements of information, details on stakeholders and their role, and highlights a number of bureaucratic and diplomatic issues; it compares the efforts undertaken by WHO and CND in terms of method, transparency, and involvement (or not) of interested parties, beyond governments.

Keywords: Cannabis; medical marijuana; cannabidiol; scheduling; United Nations; Commission on narcotic drugs; World Health Organization; drug control; Single Convention on narcotic drugs; Convention on psychotropic substances.

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