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Take-Home-Naloxon in Europa

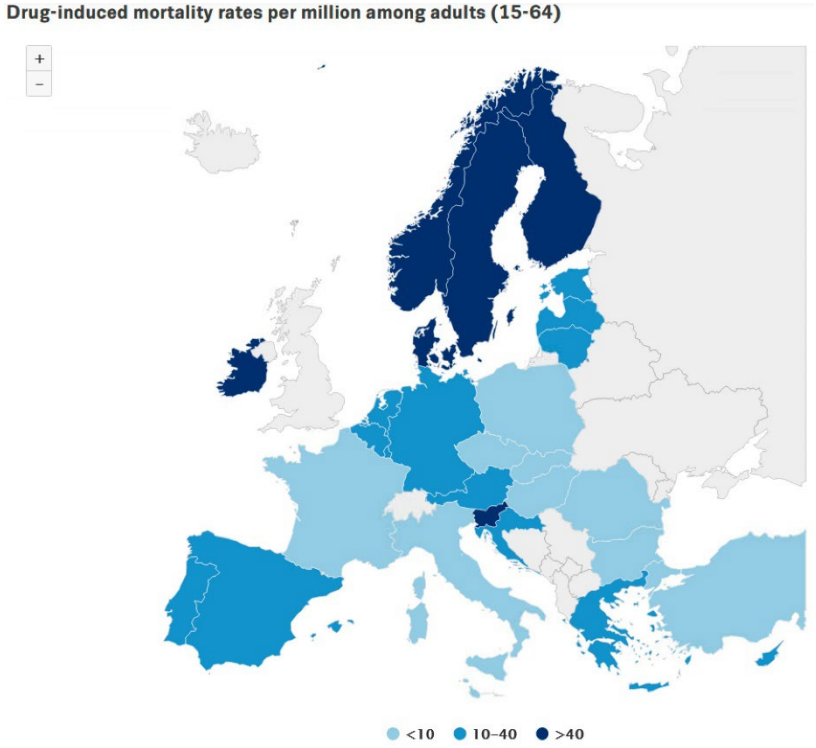
Dr. Rebecca McDonald

NALtrain Abschlusskonferenz

Frankfurt/Main am 14.03.2024

THN in Europa: Outline

- Konzept und Evidenz
- Aktuelle Situation in Europa
- Nasenspray als „Gamechanger”?
- Umsetzungsstrategien
- „Kurz-kurz“ Interventionen
- Fentanyl und synthetische Opioide



Drogensterblichkeit / Million Einwohner (15-64 J.)
(EMCDDA, 2022)

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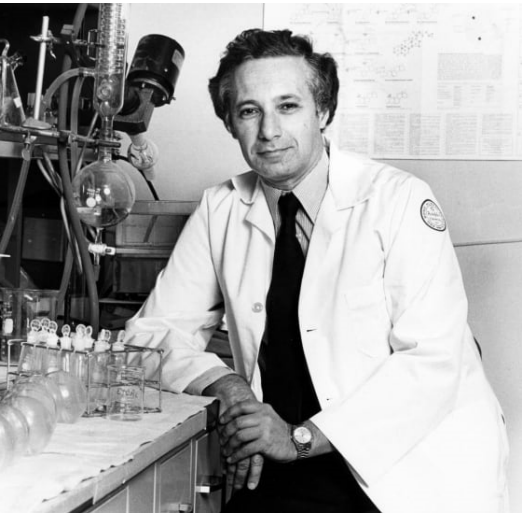
Seraf

Take-Home-Naloxon: Konzept und Evidenz

60 Jahre Naloxon



Jack Fishman (1930-2013)

- 1961: erstes Patent
- 1972: Zulassung in den USA durch FDA, in Europa in Folgejahren
- 1983: WHO Essential Medicine

McDonald, R., Campbell, N. D., & Strang, J. (2017). Twenty years of take-home naloxone for the prevention of overdose deaths from heroin and other opioids—conception and maturation. *Drug and Alcohol Dependence*, *178*, 176-187.

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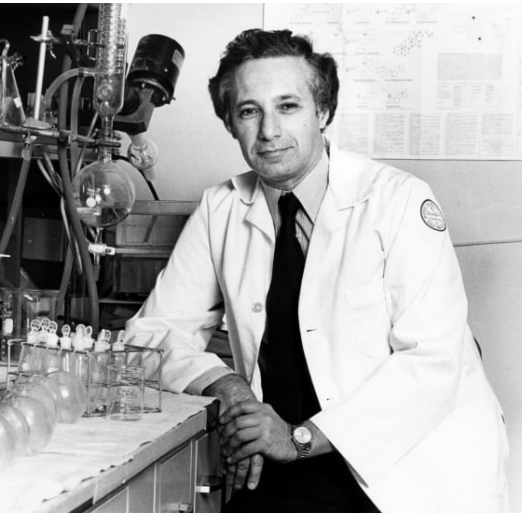

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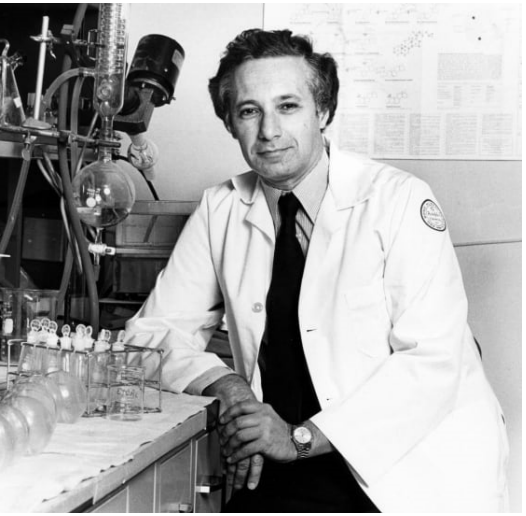

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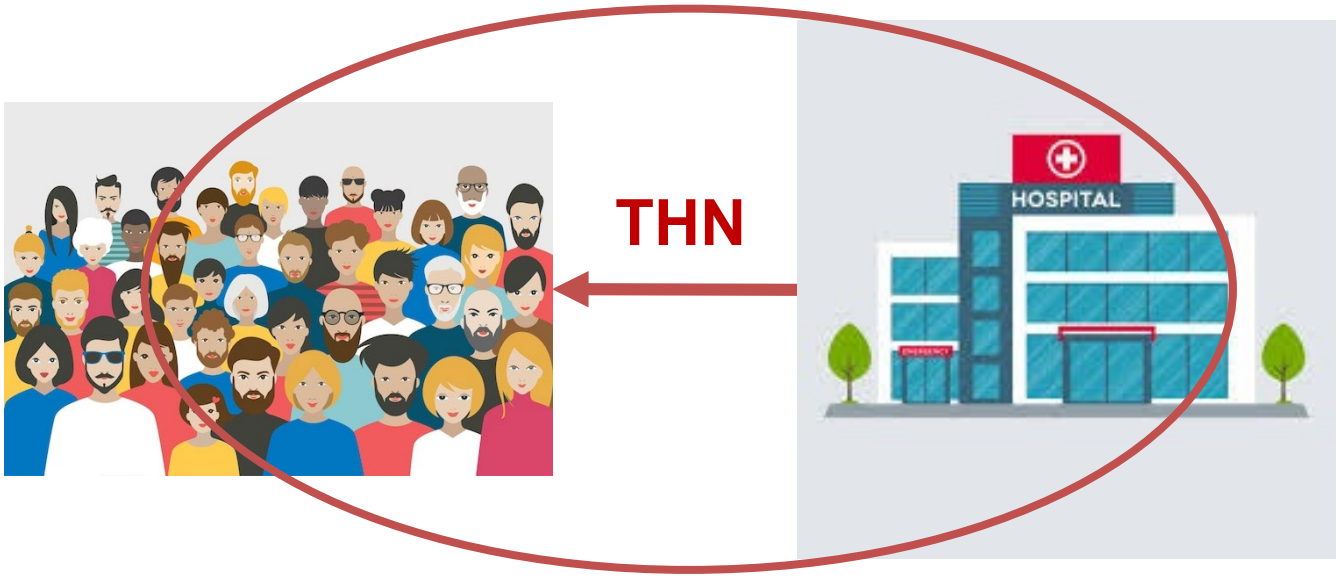

Erste THN-Vergabe in Berlin 1999

Stullen und Kanülen im Wohnkaravan

Drogen-Präventionsmobil hält im Bezirk regelmäßig an drei Standorten

Beim Einsatz am Stuttgarter Platz: (v. li.) Dennis Sommer und Felix von Ploetz. Foto: Niebuhr

Charlottenburg. Die meisten Passanten überschen das Präventionsmobil von „Fixpunkt", wenn es in der Jebensstraße, am Stuttgarter Platz oder am Ernst-Reuter-Platz steht. In der Charlottenburger Drogenszene ist der Bus allerdings gut bekannt.

Wer in den Wohnkaravan steigt, kann sich erst einmal ausruhen. Auf Wunsch gibt es Kaffee, Tee oder belegte Stullen. Es wird geredet, wenn die Besucher es wollen – auch Spritzen werden getauscht oder Kondome eingesteckt. Manchmal passiert auch mehr. Wenn das Misstrauen schwindet, werden Felix, Dennis oder Robin ins Vertrauen gezogen. Drogen und konsumierte Mengen werden dann genannt, ab und an über Ängste, Gewalt und Hoffnungsschimmer gesprochen. Die Sozialarbeiter Felix von Ploetz, Robin Walborn und Dennis Sommer, der bei „Fixpunkt" als Zivi arbeitet, setzen sich dafür ein, dass dies so oft wie möglich passiert. Ihr Ziel ist, zu helfen, wo es geht.

„Wir wollen, dass die Abhängigen zumindest auf ihre Gesundheit achten", sagt Robin Walborn. Dabei meint der Sozialarbeiter Aids- und Hepatitisvorsorge. Die Busbesucher werden beraten und bekommen nötige sterile Spritzen und Kondome. Im Hepatitismobil, was ebenfalls zu Fixpunkt gehört, werden die Abhängigen auch geimpft.

Wenn die Abhängigen darauf eingehen, berät das Busperonal über Entzug und Therapie. Walborn: „Am häufigsten wollen die Besucher über ihren Konsum sprechen." Danach kämen Themen wie Lebens- und Beziehungsprobleme, Entzug, Therapie und Übernachtungsmöglichkeiten zur Sprache. 1998 sprach das Busperonal intensiver mit 268 Busbesuchern. Fast die Hälfte von diesen Drogenabhängigen waren unter 24 Jahre alt. Genauso viele von ihnen lebten auf der Straße oder in Notunterkünften. Bei 47 Personen fruchtete die Beratung, sie wurden an Drogenberatungsstellen weitervermittelt. Robin Walborn: „Wir bieten niederschwellige Hilfe vor Ort." Die Abhängigen würden sich langsam an bestehende Hilfsangebote ran tasten. Wer zum Bus komme, müsse nicht zwangsläufig über seine Probleme sprechen. Das baue Hemmschwellen ab, so der Sozialarbeiter weiter. Welche Vorteile die Arbeit vor Ort habe? Walborn: Weitaus mehr Abhängige würden mit den Hilfsangeboten erreicht und die Drogenszene könnte genauer beobachtet werden. 1998 suchten Drogenabhängige das „Charli"-Mobil über 5.400-mal auf. Über 4.500-mal alleine am Bahnhof Zoo.

In der Jebensstraße am Bahnhof Zoo ist das Bus-Publikum bunt gemischt, darunter junge Ausreißer, die hier mit dem Drogenkonsum beginnen. In einem Bericht von Fixpunkt heißt es, dass die Gewalt rund um den Bahnhof Zoo zugenommen hat. Dies zeige sich in gewalttätigen Auseinandersetzungen der Jugendlichen untereinander. Von den Drogenabhängigen erfuhr das Busperonal, dass die sexuelle Gewalt gestiegen sei, vornehmlich der sexuelle Missbrauch und Vergewaltigungen durch Freier.

Was die mobile Drogenhilfe angeht, ist Charlottenburg stadtweit Vorreiter. Das Bezirksamt finanzierte vor drei Jahren einen eigenen Präventionsbus. Der fährt seitdem regelmäßig unter der Leitung von „Fixpunkt", ein Verein für suchtbegleitende Hilfen, bei den Charlottenburger Drogentreffpunkten vor. Personal- und Sachkosten für das „Charli"-Mobil, wie den Bus viele nennen, werden vom Bezirk getragen.

Der Grund für das Drogenhilfe-Projekt liegt auf der Hand: Charlottenburg ist durch die Drogenszenen am Bahnhof Zoo und Stuttgarter Platz weitaus höher belastet als andere Bezirke. Außerdem besteht im Rathaus seit Jahren eine Stimmenmehrheit von SPD und Grüne. Beide Parteien machen sich für neue Wege in der Drogenpolitik stark. „Für den Träger Fixpunkt stehen im Jahr 2000 wie schon im letzten Jahr 170.000 Mark zur Verfügung", so Thomas Birk, stellvertretender Vorsitzender der BVV-Fraktion die Grünen. Birk weiter: 1999 seien die 170.000 Mark im Haushaltsplan zunächst nicht enthalten gewesen. Erst eine rot-grüne Mehrheit habe beschlossen, dass Fixpunkt das Geld bekommt und es mit dem Drogenmobil weiter geht.

Auch die CDU-Fraktion steht mittlerweile zum Projekt: Man erkenne an, dass der Drogenbus sinnvoll sei, so Gerda Hornemann, stellvertretende Fraktionsvorsitzende der CDU.

In anderen Berliner Bezirken fahren ebenfalls Präventionsmobile Treffpunkte der Drogenszene an, beispielsweise an Kottbusser Tor in Kreuzberg oder in der Kurfürstenstraße in Schöneberg. Doch keiner der Bezirke leistet sich einen eigenen Bus.

Corina Niebuhr

Take home naloxone and the prevention of deaths from opiate overdose: two pilot schemes

Kerstin Dettmer, Bill Saunders, John Strang

Doctors routinely give naloxone during emergency resuscitation after opiate overdose. The distribution of naloxone to opiate addicts has recently been addressed,[1–4] and a survey of drug users shows extensive support for the provision of supplies to take away.[4] We present the preliminary results of two pilot schemes to provide take home naloxone to opiate users.

Methods and results

The Berlin project

In January 1999 drug users in Berlin were given naloxone to take home. Opiate misusers attending a healthcare project (operating from a mobile van or ambulance) were offered training in emergency resuscitation after overdose, provided with naloxone (two 400 µg ampoules), needles, syringes, an emergency handbook, and information on naloxone. They were asked to report on any use of the drug. After 16 months, 124 opiate misusers had received training in resuscitation and were provided with supplies of naloxone to take away; 40 reported back, with 22 having given emergency naloxone (two on two occasions, one on three, and one on four).

The methods of administration were diverse. Resuscitation occurred both at home (17; 59%) and outdoors (parks, public restrooms) (11; 38%). In 10 instances the individual was unknown to the person resuscitating him or her (35%). Naloxone was given intramuscularly (14 instances; 48%), intravenously (13; 45%), and subcutaneously (2; 7%). One ampoule was the usual dose given (22; 76%). Half an ampoule was given to four people (14%) and both ampoules to three (10%). In 10 (34%) instances naloxone provoked a sudden onset of opiate withdrawal; no other side effects were reported. An ambulance was called for nine (31%). All 29 people recovered. Naloxone was judged appropriate in 26 (90%) cases, of uncertain benefit (no life threatening situation) in two (7%), and pointless in one (cocaine overdose). More risky consumption as a result of the availability of naloxone was not reported.

Case 1 (Berlin)

"Three days ago, I was walking along the canal with a friend of mine. We saw a guy lying on the ground, with two people trying to help him—they were trying to help him breathe by mouth to mouth. When we ran over to them, we could tell it wasn't really working. The guy was blue in the face and hardly breathing any more. I could barely feel his pulse. Right away I gave him one ampoule of naloxone—I didn't think I could find a vein so I just shot it real slow into his upper arm. We tried to give him CPR and we called 911. Then the guy started to wake up and he started to breathe and shake a little bit. He was so thankful, he wanted to give me 50 Marks, but I wouldn't take it. When the medics came I told them I had given him the naloxone. The medics said 'Wow! So you guys have even got naloxone now?' But he thought it was great. He said we had probably just saved the guy's life." The ambulance staff then took the overdose victim to hospital for further observation.

The Jersey project

From October 1998 over the next 16 months naloxone (one minijet ready filled with 800 µg naloxone) was provided to 101 drug misusers in contact with local drug services, with instructions on intramuscular administration and the wider principles of resuscitation from overdose and recovery. Five instances of resuscitation using naloxone were reported, and all fully recovered. No adverse consequences, other than withdrawal symptoms, were reported.

Comment

This is the first published report of lives saved directly by the provision of take home naloxone. The drug was generally used appropriately. In only one case out of 34 was its use inappropriate, with two of doubtful benefit. No unexpected adverse effects were reported.

Ready prepared syringes of naloxone typically cost £3.30-6.70 per 400 µg. Since 10% of distributed doses

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John Strang *director*
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BMJ 2001;322:895–6

WHO-Richtlinien 2014

ADDICTION
SSA SOCIETY FOR THE STUDY OF ADDICTION
REVIEW
doi:10.1111/add.13326

Are take-home naloxone programmes effective? Systematic review utilizing application of the Bradford Hill criteria

Rebecca McDonald & John Strang

National Addiction Centre, Institute of Psychiatry, Psychology and Neuroscience, King's College London, London, UK

ABSTRACT

Background and Aims Fatal outcome of opioid overdose, once detected, is preventable through timely administration of the antidote naloxone. Take-home naloxone provision directly to opioid users for emergency use has been implemented recently in more than 15 countries worldwide, albeit mainly as pilot schemes and without formal evaluation. This systematic review assesses the effectiveness of take-home naloxone, with two specific aims: (1) to study the impact of take-home naloxone distribution on overdose-related mortality; and (2) to assess the safety of take-home naloxone in terms of adverse events. **Methods** PubMed, MEDLINE and PsychINFO were searched for English-language peer-reviewed publications (randomized or observational trials) using the Boolean search query: (opioid OR opiate) AND overdose AND prevention. Evidence was evaluated using the nine Bradford Hill criteria for causation, devised to assess a potential causal relationship between public health interventions and clinical outcomes when only observational data are available. **Results** A total of 1397 records (1164 after removal of duplicates) were retrieved, with 22 observational studies meeting eligibility criteria. Due to variability in size and quality of the included studies, meta-analysis was dismissed in favour of narrative synthesis. From eligible studies, we found take-home naloxone met all nine Bradford Hill criteria. The additional five World Health Organization criteria were all either met partially (two) or fully (three). Even with take-home naloxone administration, fatal outcome was reported in one in 123 overdose cases (0.8%; 95% confidence interval = 0.4, 1.2). **Conclusions** Take-home naloxone programmes are found to reduce overdose mortality among programme participants and in the community and have a low rate of adverse events.

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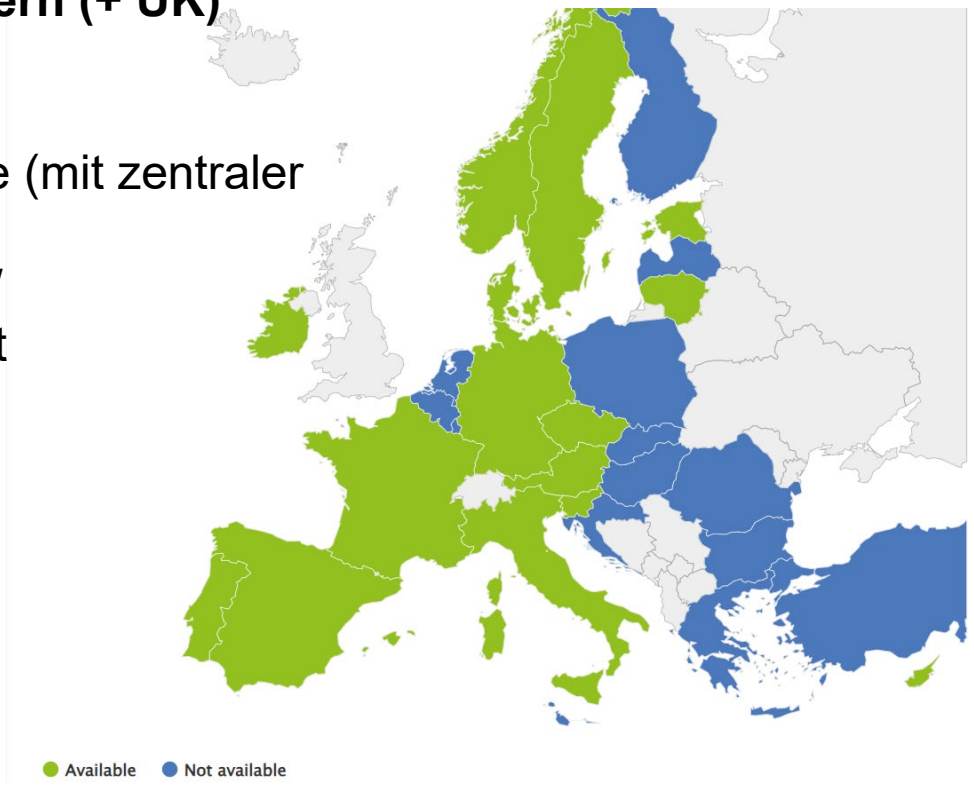
Aktuelle Situation in Europa

Anno 2022: THN-Zugang (grün)

THN-Zugang in 16 europäischen Ländern (+ UK)

- Einige Pilotprojekte (Finanzierung?)
- Lokale/regionale vs. nationale Projekte (mit zentraler Foerderung, z.B. Norwegen)
- Rezeptfrei (Italien) vs. Sammelrezept / Sonderverordnung vs. Individualrezept



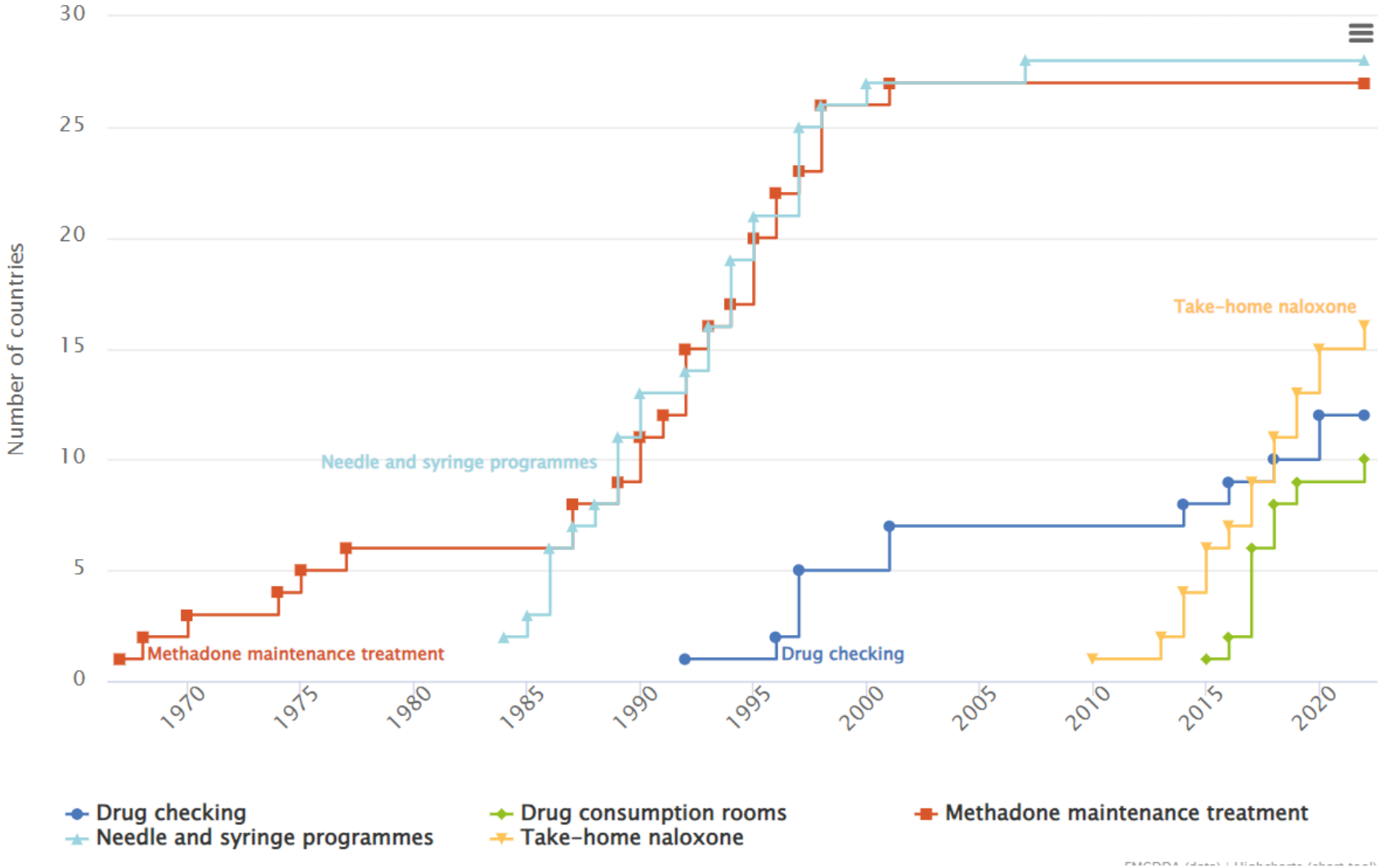
EMCDDA (2023). European Drug Report 2023.

Zum Vergleich: anno 2015

THN-Zugang in 6 europäischen Ländern (+ UK)

- Dänemark (seit 2013)
- Deutschland
- Estland (seit 2013)
- Italien
- Norwegen (seit 2014)
- Spanien (Barcelona, seit 2001)
- UK

Figure. Number of European countries implementing harm reduction interventions, up to 2022



EMCDDA: European Drug Report 2023

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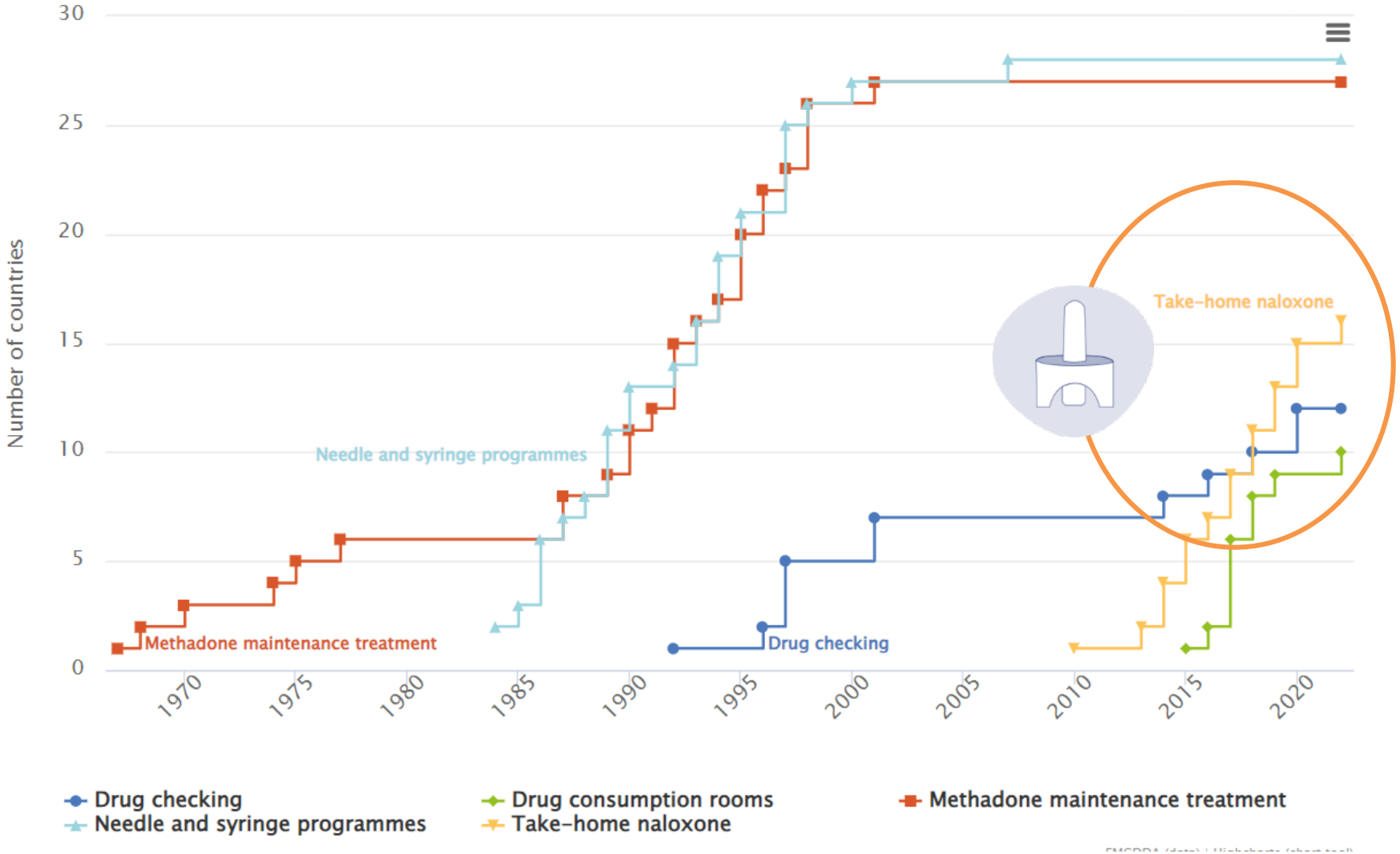
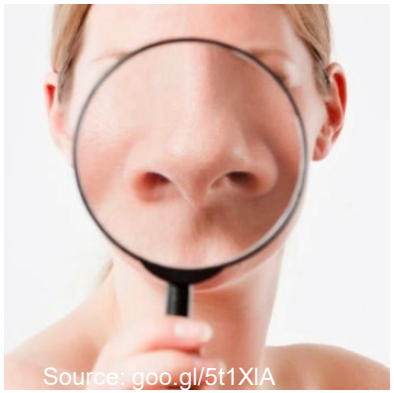


EMCDDA: European Drug Report 2023

Nasenspray = „Gamechanger“?

Entwicklung des Nasensprays: Kriterien der US FDA

1. Einfache Anwendung: Es darf keine medizinische Ausbildung erforderlich sein
2. Kleines Volumen (0.1ml) → konzentrierte Lösung
3. Gute frühe Resorption (ähnlich wie IM)
4. Dosierung ausreichend, aber nicht exzessiv



Strang, J.*, McDonald, R.*, Alqurshi, A., Royall, P., Taylor, D., & Forbes, B. (2016). Naloxone without the needle− systematic review of candidate routes for non-injectable naloxone for opioid overdose reversal. *Drug and Alcohol Dependence*, *163*, 16-23. (* joint first authors)

ADDICTION
SSA SOCIETY FOR THE STUDY OF ADDICTION
RESEARCH REPORT
doi:10.1111/add.14033

Pharmacokinetics of concentrated naloxone nasal spray for opioid overdose reversal: Phase I healthy volunteer study*

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ABSTRACT

Background and Aims Take-home naloxone can prevent death from heroin/opioid overdose, but pre-provision is difficult because naloxone is usually given by injection. Non-injectable alternatives, including naloxone nasal sprays, are currently being developed. To be effective, the intranasal (i.n.) spray dose must be adequate but not excessive, and early absorption must be comparable to intramuscular (i.m.) injection. We report on the pharmacokinetics (PK) of a specially produced concentrated novel nasal spray. The specific aims were to: (1) estimate PK profiles of i.n. naloxone, (2) compare early systemic exposure with i.n. versus i.m. naloxone and (3) estimate i.n. bioavailability. **Design** Open-label, randomized, five-way cross-over PK study. **Setting** Clinical trials facility (Croydon, UK). **Participants** Thirty-eight healthy volunteers (age 20–54 years; 11 female). **Intervention and comparator** Three doses of i.n. (1 mg/0.1 ml, 2 mg/0.1 ml, 4 mg/0.2 ml) versus 0.4 mg i.m. (reference) and 0.4 mg intravenous (i.v.) naloxone. **Measurements** Regular blood samples were taken, with high-frequency sampling during the first 15 minutes to capture early systemic exposure. PK parameters were determined from plasma naloxone concentrations. Exploratory analyses involved simulation of repeat administration. **Findings** Mean peak concentration (C_{max}) values for 1 mg (1.51 ng/ml), 2 mg (2.87 ng/ml) and 4 mg (6.02 ng/ml) i.n. exceeded 0.4 mg i.m. (1.27 ng/ml) naloxone. All three i.n. doses rapidly achieved plasma levels > 50% of peak concentrations (T50%) by 10 minutes, peaking at 15–30 minutes (T_{max}). For comparison, the i.m. reference reached T_{max} at 10 minutes. Mean bioavailability was 47–51% for i.n. relative to i.m. naloxone. Simulation of repeat dosing (2 × 2 mg i.n. versus 5 × 0.4 mg i.m. doses) at 3-minute intervals showed that comparable plasma naloxone concentrations would be anticipated. **Conclusions** Concentrated 2 mg intranasal naloxone is well-absorbed and provides early exposure comparable to 0.4 mg intramuscular naloxone, following the 0.4 mg intramuscular curve closely in the first 10 minutes post-dosing and maintaining blood levels above twice the intramuscular reference for the next 2 hours.

Pharmacokinetic study in healthy volunteers

Rationale:

- Naloxone has no pharmacological effect in healthy volunteers
- *Aim 1:* Compare early exposure: IN vs. IM
- *Aim 2:* Assess IN naloxone pharmacokinetics, incl. bioavailability

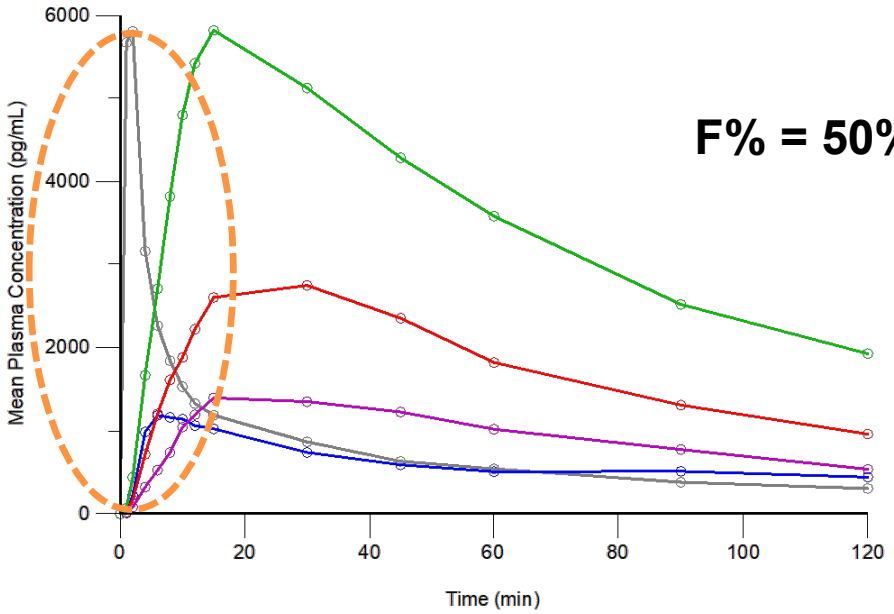
Design:

- Open-label, randomized 5-way crossover (n=38)
- Three intranasal (IN) vs. two parenteral doses
  - IN 1mg/0.1mL vs.
  - IN 2mg/0.1mL vs.
  - IN 4mg/0.2mL vs.
  - IV 0.4mg/mL vs.
  - IM 0.4mg/mL (reference)

Methods:

- IN spray as 0.1ml from Aptar device
- Intense early blood sampling 0-15 min (+1, 2, 3, 4, 6, 8, 10, 12.5, 15 min)

Naloxone Resorption von 0-10 Minuten



F% = 50% Bioverfügbarkeit

IV Naloxone 0.4 mg
IM Naloxone 0.4 mg
IN Naloxone 1 mg
IN Naloxone 2 mg
IN Naloxone 4 mg

2017: Konditionale EMA Zulassung von Nyxoid

EUROPEAN MEDICINES AGENCY
SCIENCE MEDICINES HEALTH

14 September 2017
EMA/CHMP/594248/2017
Committee for Medicinal Products for Human Use (CHMP)

Summary of opinion[1] (initial authorisation)

Nyxoid

naloxone

On 14 September 2017, the Committee for Medicinal Products for Human Use (CHMP) adopted a positive opinion, recommending the granting of a marketing authorisation for the medicinal product Nyxoid, intended for the treatment of opioid overdose. The applicant for this medicinal product is Mundipharma Corporation Limited.

Nyxoid will be available as a nasal spray (1.8 mg). The active substance of Nyxoid is naloxone, an antidote that acts as opioid receptor antagonist (ATC code: V03AB15).

NalPORS Studie (2019-24)

Naloxone Prospective Observational Research Study (PI: Strang)

- N = 6.000 THN-Empfänger in 5 Ländern
- Systematisches Follow-Up nach 6 Monaten (Telefon)
- Zielrekrutierung: 3.000 THN-Empfänger mit Nyxoid-Kits

Ziele

- Bestimmen des Anteils der Naloxon-Verabreichungen durch THN-Empfänger, die bei Opioid-Überdosierung sind → Wirksamkeit
- Bestimmen der Häufigkeit von Todesfällen / Krankenhauseinweisungen in 24 Stunden nach THN-Verabreichung → Sicherheit

Dänemark
England
Schottland
Schweden
Wales

- Erste Ergebnisse zu Jahresende 2024

Metrebian, N., Carter, B., Eide, D., McDonald, R., Neale, J., Parkin, S., ... & Strang, J. (2023). A study protocol for a European, mixed methods, prospective, cohort study of the effectiveness of naloxone administration by community members, in reversing opioid overdose: NalPORS. *BMC Public Health*, *23*(1), 1608.

“Carriage”: Wer hat THN mit dabei?

- n=725 PWUO, Angehörige, Professionellen

Vergleich Nasenspray vs. Spritze vs. Ampulle

- 73% Nasenspray am einfachsten zu benutzen
- Im Notfall auch bereit zu nutzen:
  - 66% Spritze (bis dato Standard in UK)
  - 39% Ampulle

THN carriage

- 1 in 5 Personen mit THN am Tag der Befragung
- 17.4% PWUO
- 29.6% Angehörige
- Carriage zentrales Thema für Training!
  - Sofortiger Zugriff in Notfällen
  - Zweck des Kits: für sich selbst / andere

European Addiction Research

Brief Report

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Take-Home Naloxone Kits: Attitudes and Likelihood-Of-Use Outcomes from a European Survey of Potential Overdose Witnesses

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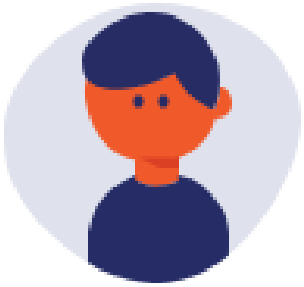

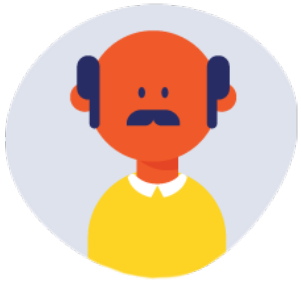

THN-Umsetzung in Europa im Vergleich

Wie funktioniert Vergabe gut?

Was sind Hindernisse?

International Journal of Drug Policy 107 (2022) 103787

Contents lists available at ScienceDirect

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journal homepage: www.elsevier.com/locate/drugpo

Research Paper

A rapid assessment of take-home naloxone provision during COVID-19 in Europe

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THN-Vergabe: 2020 vs. Vorjahr

Table 2
Take-home naloxone distribution average and changes, reported as numbers of kits.

Country	Data level	Average monthly distribution		Change(Δ 2020-2019)	Population[6]	Average[5] monthly distribution rate per 100,000 population
		2019 Period:01.01.2019 –31.12.2019	2020 Period:01.01.2020-31.10.2020			
Austria	Site[1]	3 (SD: 2.0) Range: 0-7	1 (SD: 1.8) Range: 0-5	-66.6%	8,916,860	0.02
Catalonia (Spain)[2]	Region	71 (SD: n/a) Range: n/a	43 (SD: n/a) Range: n/a	-39.4%	47,363,420	0.12
Denmark	Country	0 (SD: 0) Range: 0-0	18 (SD: 18.4) Range: 0-55	n/a	5,831,400	0.15
England	Site(s)[3]	144 (SD: 16.5) Range: 7-56	164 (SD: 16.3) Range: 3-58	+13.8%	56,550,000	2.72
Estonia	Country	62 (SD: 11.1) Range: 45-83	51 (SD: 16.3) Range: 31-83	-17.7%	1,329,480	4.25
Lithuania	Country	100 (SD: 60.0) Range: 29-194	129 (SD: 71.0) Range: 33-271	+29.0%	2,794,890	4.10
Northern Ireland	Country	91 (SD: 35.4) Range: 44-163	148 (SD: 10.1) Range:131-168	+62.6%	1,896,000	6.30
Norway	Country	311 (SD: 121.4) Range: 288-533	348 (SD: 42.8) 292-410	+11.9%	5,379,480	6.13
Scotland	Country	1,077 (SD: 132.9) Range: 857-1,317	1,554 (SD: 1,004.8) Range: 1,040-3,993	+44.2%	5,466,000	24.07
Sweden	Site(s)[4]	99 (SD: 17.9) Range: 64-126	116 (SD: 12.9) Range: 99-138	+17.2%	10,353,440	1.04
Wales	Country	389 (SD: 54.6) Range: 309-476	389 (SD: 70.0) Range:272-532	0%	3,170,000	12.27

Was funktioniert, bzw. was nicht?

Table 3
Take home naloxone distribution volume changes and change factors.

	Q1: 2019 vs. 2020 THN kits			Q5: Change factors towards:							
	Decrease	Increase	No change	Less distribution				More distribution		Change in approach	
				Service closure	Reduced service delivery	No or reduced training	Funding issues	Street outreach	High-volume distribution	Novel approaches	Hygiene measures
Country											
Austria	X			X		X					
Catalonia (Spain)	X			X	X			X			
Denmark		X			X	X	X				X
England		X			X				X	X	
Estonia	X				X				X		
Lithuania		X		X	X				X		
Northern Ireland		X		X				X	X	X	
Norway		X			X					X	
Scotland		X								X	
Sweden		X				X			X		
Wales			X		X			X	X		X

“Lessons learnt” aus der Pandemie

Flächendeckende THN-Verteilung möglich durch:

- Standardmäßige Vergabe an Substitutionspatient*innen („co-prescribing”; UK)
- Einführung von THN-Lieferung per Post (Bestellung im Online-Portal; Schottland)
- Street Outreach: Peer-to-Peer Vergabe (UK)
- Entwicklung eines Online Naloxon-Trainings (Norwegen)
- Vergabe von mehreren THN-Kits pro Kontaktpunkt (z.B., Estland)
- In 6 Ländern: offizielle COVID-19 Guidelines mit Empfehlung von vermehrter THN-Verteilung → fortbestehend!

UiO : Institute of Clinical Medicine
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Kurz-Kurz-Interventionen

Leave-Behind-Naloxon in Wales

Take-Home-Naloxon nach Notaufnahme

Was ist mit Fentanyl und synthetischen Opioiden?

zeit • Following

zeit In Deutschland sterben wieder mehr Menschen an Drogen. Im Jahr 2022 stiegt die Anzahl der Drogentoten im Vergleich zum Vorjahr um 164 auf 1990. Die Hauptursache: Opioide.

Experten befürchten, dass in den nächsten Jahren noch Schlimmeres drohen könnte. Denn immer mehr drängt sich Fentanyl, ein chemisch hergestelltes Opioid, auf den Markt. Konsumierende, die Heroin rauchen oder intravenös injizieren, nehmen es oft ungewollt und aus Unwissenheit ein. Doch allmählich wird es auch als bewusste Alternative zu Heroin verwendet.

Mehr zum Thema Fentanyl findet ihr

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February 19

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Neben klassischen Opiaten wie Heroin drängen seit geraumer Zeit **synthetische Varianten** auf den Markt. Besonders eine Substanz wird in diesem Zusammenhang immer wieder genannt: **Fentanyl**.

Es ist der Stoff, der auch hinter der US-amerikanischen Opioidkrise steht. Fentanyl ist **100-mal potenter als Heroin**, die **tödliche Dosis liegt bei 2 statt 200 Milligramm**.

ZEIT ONLINE

»**Die Dealer** sagen zwar vielleicht, dass die Konsumenten vorsichtig sein sollen. Aber sie **sagen nicht, das sind synthetische Opioide**, sondern bloß: Das ist starkes Heroin.«

Andrew Cunningham von der Europäischen Beobachtungsstelle für Drogen und Drogensucht

ZEIT ONLINE

Naloxon in den USA: Je stärker, desto besser?

Morbidity and Mortality Weekly Report (*MMWR*)

Comparison of Administration of 8-Milligram and 4-Milligram Intranasal Naloxone by Law Enforcement During Response to Suspected Opioid Overdose — New York, March 2022–August 2023

Weekly / February 8, 2024 / 73(5);110–113

Print

Please note: *This report has been corrected.*

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View suggested citation

Summary

What is already known about this topic?

In 2021, the Food and Drug Administration approved an 8-mg intranasal naloxone product, with twice the amount in the usual 4-mg dose; no data on use of this product in probable opioid overdoses are available.

What is added by this report?

Fazit: Kein Unterschied in Überlebensraten zwischen 4 mg und 8 mg, aber 8 mg hatte mehr Nebenwirkungen wie Erbrechen.

Dublin, Irland im November 2023: 42 Überdosierungen in 36 Stunden

Zusammenfassung

Herausforderungen für die flächendeckende Verteilung

- Problem Verschreibungspflicht in D: Befreiung von der Rezeptpflicht? Best Practices bzw. Modelllegislation auf EU-Ebene?
- Naloxon-Nasenspray: einfach zu verabreichen – aber: Carriage wichtig!
- Bestehende Kontaktpunkte nutzen:
  - Substitutionsbehandlung (“co-prescribing”)
  - Justizvollzug (“THN on release”)
  - Entzugs- und Entwoehnungseinrichtung (“THN on discharge”)
  - Streetwork: Peer-to-Peer Vergabe
- Potentielle Gefahr Fentanyl und synthetische Opioide:
  - Monitoring von Substanzen (inkl. nicht-Opioiden) durch Drug Checking Services, Vergabe von Fentanyl-Test-Streifen, Drogenkonsumraeume
  - Bestehende Harm Reduction Infrastruktur fuer Notfall-Preparedness nutzen
  - Schnellen Zugang zu Naloxone fuer lokale “Outbreaks” sichern
- Barriere Stigma: Dialog zwischen User-Community und Verschreibern & Training → Naloxon als Notfallprophylaxe

Vielen Dank!

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