Annual Report
2023

MED BOX

THE AID LIBRARY

INTRODUCTION

MEDBOX- The Aid Library is an open-access online library aiming to increase healthcare quality worldwide.

Quality assurance and accountability are essential values in humanitarian action as well as healthcare settings, and they receive growing attention from affected populations, healthcare workers, humanitarian actors, donors, and the public. The easy-to-use structure of MEDBOX facilitates the application of common health standards, increasing the impact and quality of the different interventions carried out by health workers.

EXECUTIVE SUMMARY

Since its launch in October 2013, MEDBOX has achieved a remarkable reputation. The growing numbers of views, downloads, and an enormous increase in users are an excellent testament to our work in terms of quality and utility.

2023 was an exceptional year, as MEDBOX celebrated its 10th anniversary in October. Ten years in which MEDBOX has grown steadily, especially thanks to the loyalty of our users and partners.

Otherwise, 2023 was also characterised by multifactorial crises to which we had to react. The increasing number of climate-related natural disasters kept the world on tenterhooks as entire regions were flooded or hit by earthquakes, and thousands of people had to give up their livelihoods. Healthcare in the affected regions was a challenge, so we tried to provide material such as emergency health kits or an issue brief on natural disasters. In addition, the PLANETARY HEALTH TOOLBOX was constantly updated, which provides an up-to-date collection of guidelines and clinically relevant training materials that revolve around the cutting-edge interface between climate change and humanitarian health for healthcare workers worldwide.

We are pleased to announce that two TOOLBOXES have been constructed and launched in 2023: The NEGLECTED TROPICAL DISEASES (NTDs) TOOLBOX and the HEALTH FINANCING TOOLBOX. The HEALTH FINANCING TOOLBOX was primarily designed by Tilman Rüppel, our colleague from the advocacy department at medmissio.

In the background we are developing a new TOOLBOX to be launched in 2024. Noncommunicable Diseases (NCDs) are diseases that are neither caused by infectious agents nor transmitted from person to person but usually develop over a long period and are often chronic. The best-known NCDs are diabetes, chronic obstructive pulmonary disease, and cardiovascular disease. NCDs are responsible for the majority of deaths worldwide (70%), contribute significantly to morbidity, and lead to disability and reduced quality of life.

We were also represented at several events, such as the Humanitarian Symposium in Munich and we held webinars, in which practice-orientated research work with MEDBOX was presented.

CURRENT STATUS IN NUMBERS AND FACTS

28953

Documents uploaded

22

Toolboxes online
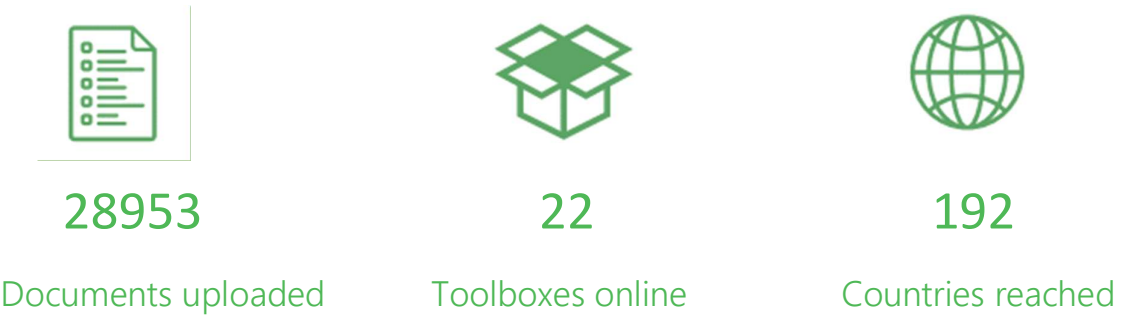
192

Countries reached

Figure 1: Highlights of key statistics

Many new documents were uploaded in 2023; old ones were updated or cleared out. The LEPROSY TOOLBOX was dissolved, and the documents entered were added to the new NTDs TOOLBOX. The HEALTH FINANCING TOOLBOX was also created.

The following graph provides a deeper understanding of the trends in the MEDBOX visitor statistics within broader regional and global dynamics. It underscores the importance of the project's mission and its relevance in addressing pressing issues faced by actors in the health sector worldwide.
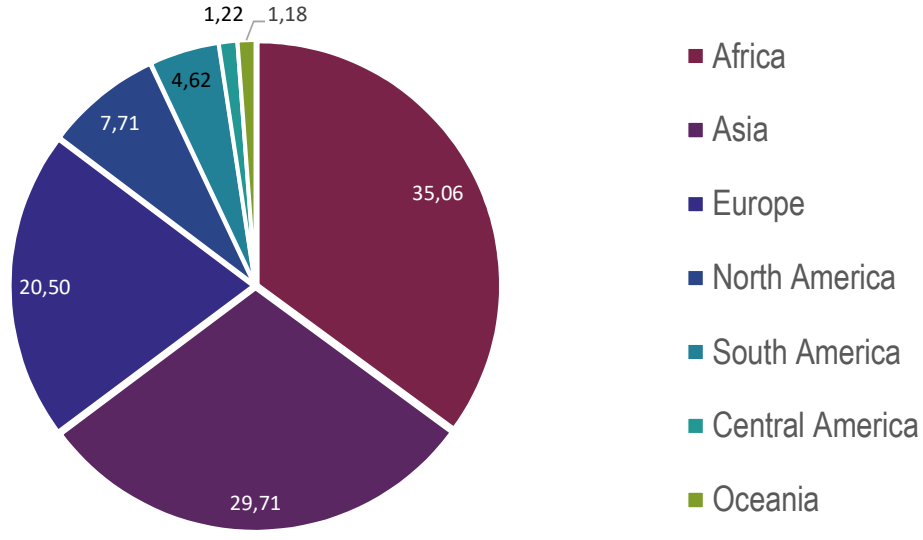
Pie chart values:
- Africa: 35,06
- Asia: 29,71
- Europe: 20,50
- North America: 7,71
- South America: 4,62
- Central America: 1,22
- Oceania: 1,18

Figure 2: Visitor split by region for Jan – Dec 2023 (in percent)

Overall, there were only slight changes in the number of visitors by region as compared to 2022. The largest group of visitors (35%) came from the African continent, with a slight decrease from 2022. The numbers suggest that MEDBOX continues to attract significant attention and engagement from the African regions. The share of visitors from Asia hasn't changed significantly from the previous year (29,7%), but there has been an increase in the number of clicks from Indonesia. This could be due to the MEDBOX webinar for health librarians held in Indonesia in 2023. **The Central American region (1,22%) and Oceania (1,18%) have slighty increased their share of visitors**. While Oceania recorded a slight uptick of 1.18%, it remains at the bottom of the list regarding visitor distribution. This suggests there may be room for increased outreach or tailored efforts to engage audiences in Oceania. Similar to 2022, South America saw an increase in the percentage of visitors in 2023 compared to the previous year (4.62% compared to 3.3% in 2022). This rise could be attributed to various factors, including the socio-political climate in the region. These factors create a complex landscape that potentially increases the need for humanitarian aid and resources like those provided by MEDBOX - the Aid Library. In addition, the MEDBOX team has worked hard to provide additional literature in Spanish. Country-specific visits have hardly changed.
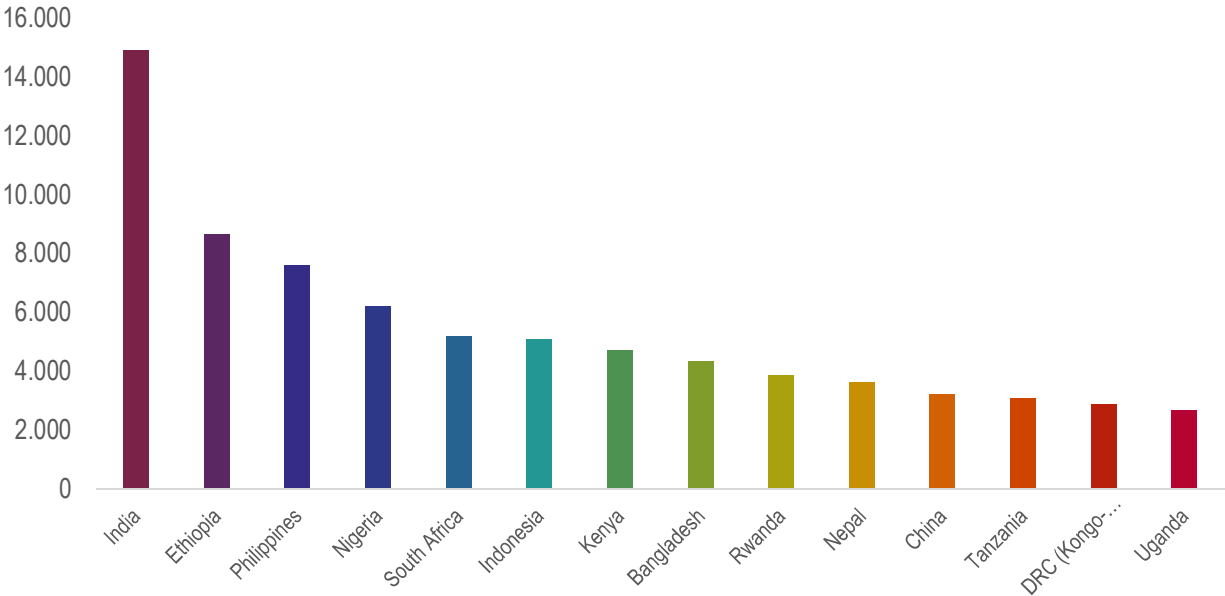

Figure 3: Visitor split by country (excluding Europe) for Jan – Dec 2023, absolute numbers

RANKING OF CATEGORIES

The 22 TOOLBOXES have been the most visited category on MEDBOX since 2022 This has remained constant in 2023. Downloads to the other categories also remained roughly the same.

Figure 4: Size of categories by number of downloads in 2023

The number of hits by category remained very similar to the previous year. The TOOLBOXES have the highest number of downloads, followed by the countries. The only change was in the Pharmacy & Technologies and Capacity Building breakdown. These have swapped places so Capacity Building is ahead of Pharmacy & Technologies. This highlights the need to expand and update the Pharmacy TOOLBOX to continue to provide the target group with relevant information. Visits to the TOOLBOXES are also very similar compared to 2022. The NTD TOOLBOX, launched in 2023, has made great strides.

RANKING OF TOOLBOXES

Since MEDBOX was founded 22 TOOLBOXES were created, of which one (Leprosy) was dissolved in 2023 and integrated into the NTD TOOLBOX. The EBOLA TOOLBOX has remained our most used TOOLBOX in the past 10 years. Based on the year of publication (2021) the PLANETARY HEALTH TOOLBOX is also very popular with so far ca. 100.000 views. The same applies to the health topics that have a global impact and have a major influence on society, especially in this day and age. The context-related TOOLBOXES, such as the REFUGEE TOOLBOX, the RAPID RESPONSE TOOLBOX, the CONFLICT TOOLBOX and the CAREGIVER TOOLBOX, are frequently accessed. In terms of specific diseases, access to the COVID-19 TOOLBOX naturally decreased in 2023 However, documents from the areas of Antimicrobial resistance (AMR) and mental health or disability are an important topic regardless of current global disease events. This is also the reason for us as the MEDBOX team to continue to focus on these TOOLBOXES and to meticulously update and expand them. You can read more about our plans for 2024 in the Outlook section of this annual report.
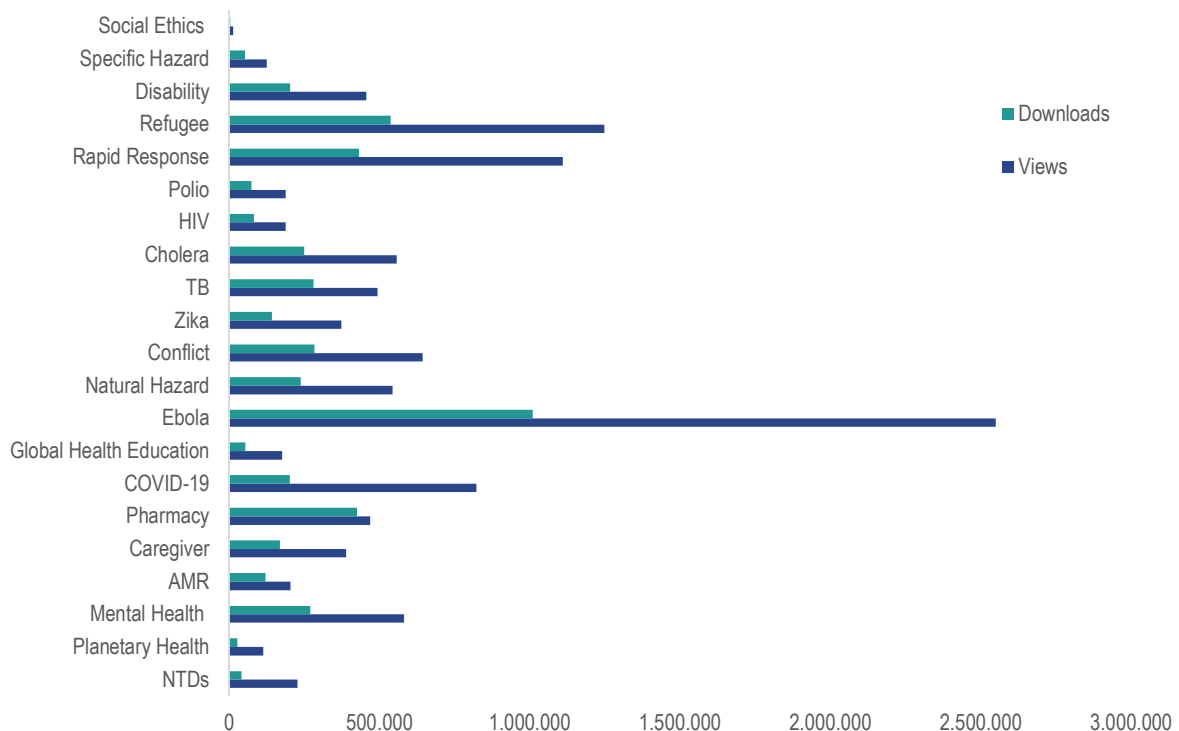

Figure 5: Views and downloads of the Toolboxes since launch until Jan 2024

The NTDs TOOLBOX published in 2023 has already collected an impressive 200.000 of views in the short time available. As one of the neglected diseases, the LEPROSY TOOLBOX, which has existed since 2015, has been integrated into the NTDs TOOLBOX. From the calculation of views and downloads seen in Figure 5 the data of the LEPROSY TOOLBOX have been deducted in order to obtain a more realistic assessment of the use of the NTDs TOOLBOX.

ISSUE BRIEFS

In 2023, MEDBOX published four issue briefs on important topics, current challenges, and outbreaks, making it 34 issue briefs in total since the inception of them in 2020.

Issue Brief 31: Antimicrobial Resistance (AMR)

AMR is an increasing threat to global public health worldwide, requiring cross-sectional and cross-disciplinary action. It is present in every country and is spurred by several human-made factors, including over- and/or inadequate use of antibiotics, poor hygiene and infection prevention control, and excessive usage of antibiotics outside the health care sector, e.g. in livestock production. The issue briefs contain the most relevant documents addressing AMR-related topics like guidelines, surveillance, infection prevention & hygiene, livestock production, and training material and videos.

Issue Brief 32: Ukraine conflict and food security

Since February 2022, the war between Russia and Ukraine has triggered the largest movement of refugees in Europe since the end of the Second World War. The humanitarian catastrophe has had impacts worldwide. The war is driving up the cost of fertilizer and transport, while at the same time, droughts in various regions of the world are further tightening food supplies, which came from Ukraine. Rising prices have exacerbated hunger crises in Somalia, Yemen, and Madagascar. This issue brief summarises the impact the conflict has had on food security.

Issue Brief 33: Cholera Update

Cholera is an acute diarrhoeal infection caused by eating or drinking food or water that is contaminated with the bacterium Vibrio cholerae. Cholera remains a global threat to public health and is an indicator of inequity and lack of social development. The major underlying causes of potential outbreaks are lack of safe water and sanitation, poor environmental infrastructure, lack or inadequacy of health care services, and increased population movement. Climate change becomes an additional trigger, as extreme climate events like cyclones, floods and droughts reduce access to safe water and create an ideal environment for Cholera to thrive. 25 countries have reported cases since the beginning of 2023.

Issue Brief 34: Natural Disasters

The number of fatalities from natural disasters can vary significantly from year to year; some years, there are very few fatalities until a new major catastrophic event claims many lives. Looking at the average over the last ten years, about 45,000 people died each year worldwide from natural disasters. This represents about 0.1% of global deaths. The definitions for catastrophes, disasters, and emergencies vary significantly. A catastrophe describes an event causing significant and usually sudden damage or suffering. A disaster describes a sudden accident or natural catastrophe that causes great damage or loss of life. Lastly, an emergency describes a serious, unexpected, and often dangerous situation for affected populations requiring immediate action. We know from historical data that early prediction, emergency preparedness, and response systems significantly reduce death tolls. This issue brief summarises essential facts and guidelines to prepare for future events.

10 YEARS OF MEDBOX - The Aid Library: A Decade of Access to Health Information for All

In October 2023, the MEDBOX celebrated its 10th anniversary. Ten years of constant dynamism, expansion of content, and many goals that have been exceeded. To mark the occasion, we would like to give our readers a brief insight into the development of MEDBOX over the years. Dr Joost Butenop and Sieglinde Mauder, the two most influential people in the history of MEDBOX, will share their views and experiences on the set up of MEDBOX. We want to thank both of them for their trust and constant support, as well as for the passion, hard work, and vision with which they have paved the way for and implemented a database that makes access to health information fair and low-threshold.

THE IDEA OF MEDBOX
By Joost Butenop, founder of MEDBOX

It was in 2008 that the idea of MEDBOX was born. During a Health Cluster meeting in Myanmar following the humanitarian interventions for the Cyclone Nargis the discussion on possible malaria outbreaks in displaced populations was discussed with WHO, the Ministry of Health and cluster members. One NGO raised the wish to access the "Malaria in Emergencies" guideline from WHO and asked if that could be made available for all. The WHO colleagues brought two CD ROMs with soft copies of the guideline for all to copy on their laptops at the next Cluster meeting a week later. This was the wakening moment when I thought something is going wrong here, because the guideline is available online. And internet access was good in Yangon at that time, where the international humanitarian community gathered for their support missions. The idea was born to create a one-stop-shop for all published hands-on guidelines and checklists of use for humanitarian health action, beyond the WHO guidelines. The idea felt so much of "common-sense" that an intense research started to look for just this platform. All experts we asked were also sure that this already existed but no one could pinpoint it. Available online libraries had a strong focus on research, but not on "hands-on" material.

Many of those libraries appeared clumsy in their design and cumbersome to use. However, it took the experiences from Haiti and the subsequent cholera outbreak in 2010 to re-invoke this idea, and finally in 2012 the concrete work started to develop the MEDBOX. This was also the time when the Health Information for All Network (HIFA) was formed, lobbying for open access to textbooks and guidelines for routine health work

'It is a shameful fact that [...] people are still dying because their healthcare workers don't have access to the information they need.' (V. Barbour, Editor-in-Chief, PLoS Medicine, 2011)

Many smart minds were involved in the preparation of MEDBOX, it was a unique team exercise across the boundaries of organisations and their sensitivities. The name "MEDBOX" was invented by Sieglinde Mauder, the adds-on "The Aid Library" came from Joost, the idea of the logo in a shape of a 3-D-box and its green colour – in line with the logo colour of the medmissio (then: Medical Mission Institute Würzburg) - came from team member Minattallah Boutros, the final design was created by Australian designer Jess Knollmeyer. The phrase "Tools to simplify your life" and the majority of the still-lasting catch-phrases for PR and information came from the Australian intern Stefanie Ellis, who helped us out for 6 months during the storming phase. Priya Behrens-Shah, native English speaker and humanitarian advisor at Welthungerhilfe at that time, took on the polishing of the language.

MEDBOX.ORG THE AID LIBRARY. TOOLS TO SIMPLIFY YOUR LIFE.

The six colour bars, which are part of the MEDBOX logo, reflect the originally planned six main categories matching the six letters of MEDBOX, which were later extended to eight. Once the logo was finally designed, the MEDBOX phrase was legally patented to MEDBOX® and fundraising began. Over 40 NGOs were approached to join this exciting new project, the German Foreign Ministry was addressed during a humanitarian coordination forum, and applications for innovation funds were written. MEDBOX® was created as a "German contribution" to the world-wide relief efforts in humanitarian health action, basically aiming at a democratisation of knowledge. The state-of-the-art tool at that time was the "Blue Trunk Library" of WHO, a metal box with 150 books for basic health action in remote settings, costing around 2.000 USD, plus shipment. The target group for MEDBOX was – and still is – pretty much the same: the humanitarian workers in countries with limited or no access to libraries and standardised guidelines. We
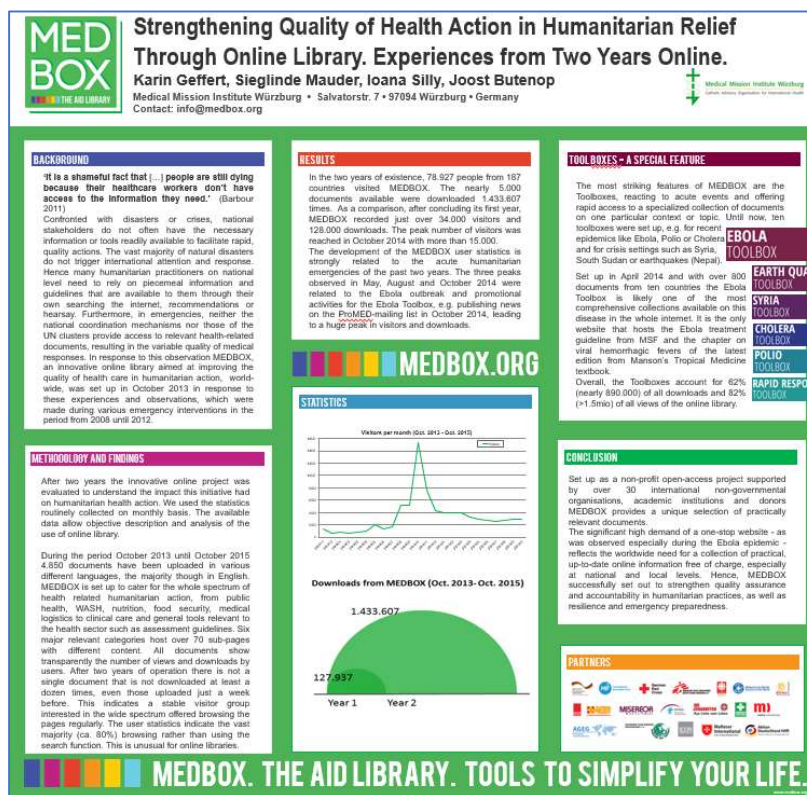
wanted to bring the "invented wheel" to the people that have to deal with humanitarian emergencies that never make it to the international headlines but still require significant health action, e.g. floods in Baluchistan (PAK), Orissa or Bihar (IND), seasonal hurricanes in South East Asia, refugee or IDP movements in Bangladesh, and of course all the "forgotten crises" such as Syria, Yemen, South Sudan, Darfur, DRC, CAR etc. In times of rapidly expanding internet access old-school libraries will become eventually superfluous.

Lots of homework remained, as we wanted MEDBOX to contain PDFs and not only the links that possibly underwent frequent changes, which required asking permission of the owners of the documents to allow a duplication of their online available material. Professional legal support helped us find a smooth and legally acceptable process for this. Also, we wanted an expert group to qualify the uploaded documents for their relevance, quality and content, avoiding a Wiki-style platform, where everyone can upload any of their products without quality control. Initially, this was taken care of by the experts from the partner institutions supporting MEDBOX financially.

October 25, 2013 marked the official launch of MEDBOX during the annual Humanitarian Congress in Berlin, which had the appropriate tile "No Access! - Who Cares?" Shortly after its launch, the first TOOLBOX was created following a serious polio outbreak in eastern Syria, a region completely cut off from the outside world due to the civil war (POLIOBOX.org). Within weeks the CHOLEABOX.org followed, one of the major accomplishments of MEDBOX, arguably the biggest and most comprehensive collection of hands-on guidelines for cholera interventions worldwide. The major breakthrough of MEDBOX was the early establishment of the EBOLABOX.org in April 2014, following the massive Ebola outbreak in West Africa. Within weeks we were able to upload over 600 documents including information material and significant treatment guidelines, including offering exclusive access to the MSF guide and the chapter from the Harrison's textbook on Viral Haemorrhagic Fevers. Both documents are not available anymore, this stands as an example for the ephemerality of an online library, that needs constant updates of its documents and research for new publications. The massive promotion of the EBOLABOX.org led to a spike of visitors and downloads, from average 1.000 visitors per months to 15.000. Today, the EBOLA TOOLBOX contains more than 1.300 documents in 16 languages. A big surprise and honour was the set up of an EBOLA TOOLBOX by the Harvard University four months after the EBOLA TOOLBOX went live. Due to a small and unintended add-on in the PDF file names to all uploaded

PDF documents on MEDBOX, we identified that the Harvard toolbox copied over 500 documents from MEDBOX. There could not have been a bigger compliment at that time for a young and pretty unknown online library than being recognised by Harvard.

Figure 6: Publication Poster of the MEDBOX

In 2014 we were able to attend a WHO congress and were awarded a poster presentation on MEDBOX. In the same year, the online library was presented at the first ever Humanitarian Innovation Congress in Oxford, UK, with an oral presentation. Within the first two years, the MEDBOX team was able to generate the funds for the development and consolidation of the MEDBOX platform.

Larger amounts of start-up funding came from the German Foreign Ministry, Misereor, Caritas, and the Humanitarian Innovation Fund (HIF). Many German NGO contributed to the start-up costs of the project, i.a. Médecins Sans Frontières (German Section), German Red Cross, Médecins du Monde, Medico international, German Doctors, Pharmacièns Sans Frontières, Samaritans Germany, German Leprosy and Tuberculosis Relief Association (GLRA), Kindermissionswerk / Die Sternsinger, DIFAEM, Malteser international, Johanniter international, and the health consulting firms AGEG and ICON Institute. Later the following donors came in: Action Medeor, missio Aachen, Renovabis, Die forschenden Pharma-Unternehmen (VfA),

Bavarian Minsitry for Family, Work and Social Affairs, Federal Ministry for Economic Cooperation and Development (BMZ), Lions Club, Apotheker Helfen e.V., Deichmann Foundation, Apo Bank and Adveniat.

Additionally, many institutions joined as technical supporters, qualifying documents or providing their own documents for MEDBOX: Research for Life, Aktion Deutschland Hilft, University of Applied Sciences Fulda, IFHV Bochum, Akkon University of Applied Sciences Berlin, All in Diary, Hesperian Foundation, Christian Connections for International Health (CCIH), Plan:G, Plan P, Forum for International health (foring) Munich, Handicap international, Econemical Pharmaceutical Network (EPN), and the Catholic Health Association India (CHAI).

Overall, the annual statistics of visitors to MEDBOX prove the value of this project with a steady increase in numbers of visitors over the first years. Our vision at the start of once having 10.000 visitors per month was met in the fourth year of its existence in 2016, and ever since surpassed. The next level to reach is: "If it is not on MEDBOX, it does not exist". Happy 10th anniversary!

Challenges in the Digital Age

By Sieglinde Mauder, former project lead of MEDBOX

In an era where the internet has become the main source of information, we often face the challenge of filtering out reliable, application-oriented, and high-quality information from the flood of search results. This applies, in particular, to healthcare professionals and humanitarian workers who rely on solid resources in their daily work routines.

In my daily work as the head of the resource centre at medmissio (formerly Medical Mission Institute Wuerzburg), I have repeatedly observed that important and up-to-date information is not readily available, and when available, it's often not free of charge. The search for relevant information is often time-consuming and frustrating. It is not always possible to assess the quality and timeliness of the sources found. Especially in times of humanitarian disasters and crises, organisations, authorities, and aid workers need quick access to practical information and recommendations for action. This real-time access to the latest guidelines, strategy plans, and educational materials can save lives.

In 2010, my colleague Joost Butenop returned from a mission in Haiti, which was hit by an earthquake crisis and a subsequent cholera outbreak, with the idea of establishing an online resource library. I was immediately excited by his idea and ready to build this project with him. In the resource centre of medmissio, I have been collecting relevant information for decades that is crucial and tailored to these contexts and for the healthcare of patients worldwide. Finally, there was an opportunity to make the accumulated knowledge available to people worldwide.

The idea for MEDBOX – The Aid Library, an innovative online library, was born. MEDBOX intended to become a central platform providing healthcare and humanitarian aid workers with easy, fast, and free access to verified information. The documents uploaded should enable professionals to improve their daily work and expand their skills. The biggest challenge was to generate financial support for this project. The Humanitarian Innovation Fund initially granted seed funding. Numerous non-governmental organisations, governmental actors, and church organisations were recruited as additional financial partners.

When we launched MEDBOX at the Humanitarian Congress in Berlin in October 2013, neither my colleague Joost Butenop nor I ever expected it to become such

a major success. MEDBOX has established itself as one of the most important re-
sources worldwide in healthcare and humanitarian aid, contributing to improving
global health.

*Figure 7: Launch MEDBOX October 2013 at
the Humanitarian Congress in Berlin*

At the beginning of the project, we thought it would be a small library with around
2,000-3,000 standard works, guidelines, and documents on key areas of global
health work. However, we soon realised that the existing categories and subcate-
gories of MEDBOX were not sufficient during epidemics or disasters. We needed
more extensive and individually tailored collections that required a more nuanced
classification. The TOOLBOXES were established. The idea of responding to chal-
lenging situations worldwide with TOOLBOXES specifically tailored to their needs
has emerged as the unique selling point of MEDBOX and has significantly contrib-
uted to its success. Today, the TOOLBOXES are the most utilised category within
MEDBOX.

These TOOLBOXES included all important guidelines for humanitarian aid in the
respective disaster situations. Further, healthcare workers can find guidelines for
diagnosis and treatment, documents on infection control, and preventive
measures. Lastly, relevant statistics, roadmaps, communication & and training ma-
terials (such as posters, videos, and online courses) are also included. All the doc-
uments are accessible in various languages. Currently, 22 TOOLBOXES are availa-
ble.

NTDs	Zika
Planetary Health	TB
Mental Health	Cholera
AMR	HIV
Caregiver	Polio
Pharmacy	Rapid Response
COVID-19	Refugee
Global Health Education	Disability
Ebola	Specific Hazards
Natural Hazards	Social Ethics
Conflict	Health Financing Toolbox

I would like to delve deeper into three of the TOOLBOXES that have been significantly challenging and that, from my perspective, represent important milestones in the development of MEDBOX – The Aid Library into one of the most crucial global healthcare and humanitarian aid resources.

EBOLA TOOLBOX: Early Action and Rapid Access to Information

The Ebola outbreak in West Africa in 2014/2015 was the worst epidemic since the discovery of the virus in 1976 and posed an acute threat to public health. MEDBOX responded quickly by being the first online resource to publish key documents in English and French on a single platform. Finding tailored treatment guidelines, hygiene measures, educational materials, and relevant information in French was particularly challenging.

In the final TOOLBOX, we provided educational videos, posters on hygiene and protective measures that could be printed and displayed in health centres as needed, treatment guidelines, and educational materials on the burial of the deceased, as ritual burials pose a significant risk of transmission.

The EBOLA TOOLBOX was invaluable not only for medical personnel but also for humanitarian organisations, and local partners who needed to adapt to new situations and take effective measures quickly. The multilingual availability of materials helped communicate and train various target groups in different contexts.

Figure 9: Examples of various documents included in the EBOLA TOOLBOX

EBOLA TOOLBOX was listed by the United Nations Platform ReliefWeb – The leading humanitarian information source on global crises and disasters as one of the most comprehensive resources on this topic.

Figure 10: Dr. Patrick Umondi in Congo using the EBOLA TOOLBOX in his daily work

CHOLERA TOOLBOX: Education and infection control are key factors in containment

Following the earthquake in 2010, Haiti was struck by a devastating cholera epidemic. The inadequate sanitary infrastructure and lack of clean drinking water facilitated the spread of Cholera. The disease spread rapidly, resulting in numerous deaths and hospitalisations. The CHOLERA TOOLBOX created for this context was crucial in providing educational materials in French, English, and Creole to inform

the population, healthcare workers, and humanitarian aid workers about cholera prevention, symptoms, and treatment.

The CHOLERA TOOLBOX has never lost its relevance. There were cholera outbreaks in at least 30 countries last year, significantly more than in previous years. Since autumn 2023, Cholera has been particularly severe in the southern part of the African continent. More than 200,000 cases have been recorded, with 3,500 deaths reported as of January 17, 2024. Therefore, the CHOLERA TOOLBOX must be constantly updated and made available in additional languages. So far, materials are accessible in 38 languages, from Amharic to Urdu.

COVID-19 TOOLBOX

With the outbreak of COVID-19 in 2019, the world faced an unprecedented global pandemic. Never in my librarian career had I ever experienced such a flood of information about a disease. The World Health Organization (WHO) coined the term "infodemic," referring to an overabundance of information, including deliberate attempts to spread false information to undermine public health response.

MEDBOX responded promptly by creating a dedicated COVID-19 TOOLBOX, containing a wealth of verified and quality-assessed information on prevention, diagnosis, treatment, and more. The platform provided comprehensive guidelines for medical personnel and easily understandable resources for the general public. This transparent and easily accessible information source played a significant role in combating misinformation and enhancing public comprehension of the pandemic.

The TOOLBOX quickly became filled with hundreds of documents. Despite faceting and categorisation, it became increasingly difficult for users to stay updated and have all the essential documents regarding the course of the epidemic, virus variants, treatment, infection control, education, etc., readily available. Therefore, we brainstormed ways to inform MEDBOX users even more effectively and concisely – the ""MEDBOX Issue Brief" was born. These issue briefs present the latest and most essential documents from MEDBOX in a short, clear overview bundled by topic. The issue briefs were such a success for COVID-19 that they continued for other important topics. By the end of 2023, 34 issue briefs had been published, covering various topics from AMR, Cholera, Ebola, HIV, Myths & COVID-19 Vaccination to Women's Cancer.

As project leader, it has always been my priority to continuously expand the reach and utility of MEDBOX and its TOOLBOXES, tailoring them to the specific needs of our partners and users and ensuring they are easily accessible to all target audiences. In addition to social media posts, videos have proven to be an effective marketing tool. Therefore, we created various video clips introducing MEDBOX and individual TOOLBOXES such as Planetary Health and Caregiver. It was enriching to involve partners from India and Kenya and leverage their expertise in the content creation process for the CAREGIVER TOOLBOX. Through personal connections and volunteers, we achieved technical implementation and design with minimal financial investment.

Figure 11: Video Clip CAREGIVER TOOLBOX

Quality, Relevance, and Accessibility

One of MEDBOX's strengths lies in its ability to quickly adapt to various contexts and target audiences, providing relevant information in real-time. Particularly in emergencies, where quick and precise information can be lifesaving, the platform is indispensable. The user and download statistics confirm our assumption and underscore the importance of this innovative project.

Healthcare professionals and humanitarian workers can access MEDBOX anytime, from anywhere, to make informed decisions and take effective actions, thus minimising the impact of crises on public health. Through partnerships with various organisations and institutions, MEDBOX has been able to use the expertise of

these organisations and tailor its services to the specific needs of certain regions and target groups.

Another key aspect of MEDBOX is its role in promoting quality and continuing education in healthcare. The platform serves as a resource for best practices and guidelines and a learning tool. Healthcare professionals can browse training materials, case studies, and guides to enhance their skills and stay updated on the latest developments in their field. This continuous education plays a role in enhancing the quality of healthcare worldwide.

Since its launch over a decade ago, MEDBOX has successfully fulfilled its mission of providing low-barrier access to high-quality health information. Its contributions range from assisting in managing acute health crises to the long-term enhancement of healthcare globally. In a world marked by constantly evolving challenges, MEDBOX remains an essential resource for those committed to promoting and implementing "Health for All."

MEDBOX – The Aid Library: A Contribution to Global Healthcare

Free access to information in healthcare is not only a moral obligation but also a fundamental human right, especially in resource-poor countries. This can be argued particularly through Goal 3 of the UN Sustainable Development Goals (SDG3): "Ensure healthy lives and promote well-being for all at all ages". Free access to health information supports this goal, especially in countries with limited resources, for the following reasons:

1. **Health knowledge as the basis for healthy lives:** SDG3 strives to ensure healthy lives and well-being for all ages. Free access to information in healthcare is crucial to provide the necessary knowledge that individuals and communities need to make healthy life choices.

2. **Equitable access to healthcare:** A key aspect of SDG 3 is to ensure that all people, regardless of their socioeconomic status or where they live, have equitable access to quality healthcare. Free access to information is a prerequisite for achieving this equality by spreading knowledge about health-promoting measures and practices.

3. **Health promotion through prevention:** SDG3 emphasises the need to prevent disease and promote health. Free access to information on preventive

measures, hygiene standards, and healthy lifestyle habits is crucial to prevent diseases and promote well-being.

4. **Strengthening health systems:** Another aspect of SDG3 is strengthening health systems, especially in resource-poor countries. Free access to information supports the training of health personnel, promotes the quality of health work, and best practices, and enables the efficient use of limited resources.

5. **Combating epidemics and diseases:** SDG3 also emphasises the need to combat epidemic diseases. Free access to up-to-date information plays a key role in the rapid response to epidemics, the dissemination of best practices to contain diseases, and the provision of lifesaving information in disaster situations.

6. **Global collaboration and knowledge transfer:** SDG3 emphasise the importance of global collaboration and partnerships. Free access to information promotes the transfer of knowledge between countries and regions, leading to wider dissemination of best practices, innovations, and advances in healthcare.

Overall, free access to healthcare information supports SDG3's goals and strengthens the fundamental human rights to equality, health, and access to information. Especially in resource-poor countries, this access is crucial to improving healthcare quality and ensuring that no one is disadvantaged due to a lack of knowledge or limited access to information. MEDBOX and the global network HIFA - Health Information for All have been campaigning for years for the right to free access to health information worldwide.

Outlook and commitment to global health

Global health work will continue to face new challenges and unforeseen crises. MEDBOX will continually adapt, respond flexibly, and strive to make access even easier, faster, and more available offline from anywhere in the world with new innovative tools. Healthcare professionals and humanitarian workers worldwide will be equipped with the knowledge they need daily to enhance and ensure patient care.

On a Personal Note

Participating in developing and establishing the online library MEDBOX – The Aid Library has enriched my experience as a librarian. This project's complexity, ranging from technical implementation and securing funding to compiling relevant health information, presented an ongoing challenge.

It has been a great pleasure to contribute my knowledge and experience from years of work as the head of the resource centre at medmissio to this innovative project. Without the support of our partners and colleagues worldwide, this project would not have been possible. Thank you!

The knowledge that MEDBOX provides people worldwide with free access to practical and vital health information, thereby contributing to healthcare improvement, has always been my motivation and responsibility.

HEALTH FINANCING TOOLBOX

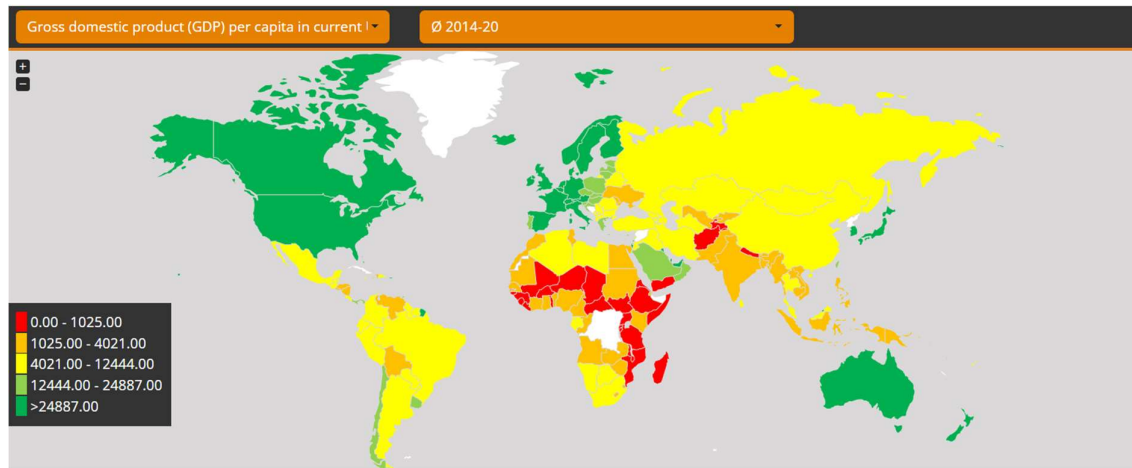By Tilman Rüppel, medmissio – Institute for Global Health

Figure 12: The new map function within the ADVOCACY TOOLBOX on the MEDBOX website

Health financing is essential for prevention, diagnosis, therapy, and further health-specific activities. Funding in this regard either stems from public or private sources. Public health insurance schemes and tax-funded healthcare provisions are crucial to avoid catastrophic health spending by individuals. However, several nation-states such as low-income countries, lack the economic foundation for sufficient domestic resource mobilisation to fund their health sectors. That is why official development assistance for health remains important to enable healthcare for all and leave no one behind.

Therefore, MEDBOX decided to create the HEALTH FINANCING TOOLBOX, which displays available resources in English and numerous world maps and data tables to shed light on health financing indicators. This information serves to equip professionals working in health, politics, and/or development assistance to deepen their understanding of the financial side of healthcare in single countries. Knowledge about the sources, ways, and amounts of health financing is valuable because it helps to comprehend the provision of health-specific activities and the absence of adequate measures. In this way, it is possible to identify and close gaps regarding healthcare coverage in general and distinct health problems (e.g. infectious diseases such as COVID-19, HIV/AIDS, Ebola, tuberculosis, malaria, and so on).

To present health financing and economic indicators that are shaping the fiscal possibilities for healthcare funding of individual countries, we opted to use world

maps since this tool is highly suitable for showing differences between nations. The world maps demonstrate the distribution of public health financing and official development assistance for health and illustrate further relevant indicators such as economic capacity, national debt, government revenue, and expenditure on health in national budgets. Consequently, a large set of important indicators in terms of health financing are made available in the HEALTH FINANCING TOOLBOX. For this reason, researchers, practitioners, and the interested public do not have to search many different websites to gather the relevant information.

Additionally, several data tables depict the health financing indicators in such a way that comparability across years is enabled. For some of the statistics, compare of whether international targets are met. Notably, the information provided in the HEALTH FINANCING TOOLBOX does not solely contain data on domestic resource mobilisation but for official development assistance for health as well. Hence, the possibility to compare the spending flows of 23 donor countries with international goals or recommendations such as the United Nation's 0.7% target.

Moreover, we utilised MEDBOX's proven concept of aggregating literature on specific health topics by uploading approximately 200 documents relevant to health financing. Finally, the HEALTH FINANCING TOOLBOX contains a vast dataset that researchers can download and use. By including thousands of individual project entries on official development assistance for health, this dataset can serve as a basis for additional research. It can also function as a tool for analysing the health-specific activities funded via official development assistance in single countries, which might be helpful for the planning of new projects.

At the end of November 2023, we conducted a workshop in Berlin to present the newly created HEALTH FINANCING TOOLBOX, its features, and the most relevant aspects of the data. Through the direct use of the HEALTH FINANCING TOOLBOX during the workshop, the participants learned important knowledge in global health financing and essential financing aspects of the countries of the Global South. Based on this knowledge transfer, the participants could consolidate what they had learned in group work by discussing and debating the fundamental problems relating to health financing in various example countries. The content learned and further topic-specific questions were then debated in a joint discussion.

NCD TOOLBOX

By Andreas Wiegand, Apotheker helfen e.V

Noncommunicable diseases (NCDs) kill 41 million people each year, equivalent to 74% of all deaths globally. Each year, 17 million people die from an NCD before age 70; 86% of these premature deaths occur in low- and middle-income countries. Of all NCD deaths, 77% are in low- and middle-income countries. These facts are copied from the WHO website, dated 2023.

In the last decades, we managed to reduce the number of starving people and reduce the number of extreme poverties worldwide. However, our income, nutrition, and infrastructure progress led to an increase in unhealthy lifestyles. Obesity in children is almost exploding therefore, WHO has been emphasising for over a decade that NCDs are now even more prominent as the leading cause of death.

Health workers worldwide are confronted with NCDs in their daily work. Many times, not only simple treatment according to national clinical guidelines is applied. Different preventive measures are recommended and other tools and methods to support the management of the diseases are needed.

NCDs are a good example of us being 'over-news' and 'under-informed'. It is difficult to distinguish useful and less useful literature, tools, and approaches. The NCD TOOLBOX tries to assist in this respect. It does not aim to cover each and every. That would even be impossible as national differences, especially in treatment options, are huge. However, there are general aspects that may be worth taking into consideration. With the launch in 2024, you are all invited to use the tools collection.

By Laura Liebau, medmissio – Institute for Global Health

In 2023, our action made significant strides in combating the rising burden of NCDs by developing an innovative TOOLBOX dedicated to this critical health issue. NCDs have great relevance in the broader context of global health and complement our existing efforts to combat NTDs which we addressed by publishing the NTDs TOOLBOX in 2023.

NCDs pose a growing threat to public health worldwide, with conditions such as diabetes, cancer, cardiovascular diseases, and chronic respiratory diseases contributing significantly to morbidity and mortality rates. Unlike infectious diseases, NCDs are typically chronic and are often associated with lifestyle factors such as tobacco use, unhealthy diet, physical inactivity, and harmful use of alcohol. Moreover, NCDs disproportionately affect populations in low- and middle-income countries, exacerbating health inequities and straining already fragile healthcare systems. Recognising the urgent need to address the escalating burden of NCDs, the MEDBOX team embarked on a comprehensive initiative to develop a TOOLBOX dedicated to this critical health issue. The development process involved extensive research, collaboration with subject matter experts, and careful curation of relevant literature and resources. Given the vast and multifaceted nature of NCDs, organising the TOOLBOX in a manner that facilitated easy navigation and accessibility required meticulous planning and refinement. Through iterative feedback and consultation with stakeholders, we ensured that the TOOLBOX effectively addressed key areas such as prevention, screening, and managing various NCDs.

The NCDs TOOLBOX encompasses a wide range of resources to address different aspects of NCDs, including Educational Materials for medical professionals and civil society. Easy Accessible in-depth articles, reports, and educational videos providing insights into the aetiology, epidemiology, and impact of NCDs on individuals and communities. Evidence-based guidelines and protocols for healthcare professionals involved in the prevention, diagnosis, and management of NCDs, ensuring standardised and quality care delivery. As some of the NCDs are lifestyle-dependent empowering individuals through informational guides, self-management tools, and support networks to enhance their health literacy and promote self-care is one of the most important goals of the TOOLBOX. We strive to have a greater impact by providing advocacy materials and policy briefs advocating for multisectoral approaches and policy interventions to address the social determinants of NCDs and reduce their burden on society.

In addition to its standalone significance, the NCDs TOOLBOX is a complementary resource to our existing efforts in combating NTDs and infectious diseases by providing TOOLBOXES such as the Cholera-, Ebola- or NTD TOOLBOX. While NTDs and NCDs may differ in aetiology and clinical presentation, both disease groups share common characteristics, such as disproportionately affecting marginalised populations, perpetuating cycles of poverty, and requiring comprehensive and integrated approaches for effective control and prevention. By providing accessible and evidence-based resources on both NTDs and NCDs, the MEDBOX team aims to promote education on disease control programs, strengthen health systems, and advance the broader agenda of health equity.

The creation of the NCD TOOLBOX represents a significant milestone in our organisation's ongoing commitment to addressing the global burden of diseases. By leveraging digital technology and collaborative partnerships, we have developed a valuable resource that empowers health professionals and stakeholders at all levels to confront the complex challenges posed by NCDs and work towards a healthier and more equitable future for all.

As we look ahead, we remain steadfast in our dedication to advancing evidence-based solutions, fostering innovation, and advocating for policies that prioritise the prevention and control of NCDs. Together, we can build a world where every individual has the opportunity to live a full and healthy.

CONFLICT TOOLBOX - UKRAINE

By Natalie Berger, medmissio – Institute for Global Health

The war began on February 24, 2022, and is a humanitarian crisis with global implications. The MEDBOX was expanded quickly after the start with a subcategory on the Ukraine conflict within the CONFLICT TOOLBOX. During this year, until the end of the project in March 2023, the focus was primarily on updating the documents already entered, as the situation kept changing. This included researching the familiar pages and adding new relevant documents on various topics, such as situation reports, current health data, and treatment guidelines. Furthermore, important information on the German healthcare system or platforms for Ukrainians was made available in Ukrainian and Russian. The aim was to show the global impact, as it triggered the largest refugee movement in Europe since the end of the Second World War.

In addition, a second issue brief entitled "Impact on food security" was published in mid-March. Diverse effects can be observed worldwide: consumer prices for wheat, fertiliser, and transport, for example, have risen, food security in Africa is at risk, and hunger crises in countries such as Somalia, Yemen, and Madagascar have been exacerbated. This issue brief was sent out via the newsletter and published on social networks.

PLANETARY HEALTH ACTIVITIES UP-DATE

By Laura Liebau, medmissio – Institute for Global Health

The second year of the PLANETARY HEALTH TOOLBOX we marked another milestone in our journey toward fostering awareness and action in the domain of planetary health. As the world grapples with pressing environmental and public health challenges, our TOOLBOX has emerged as a vital resource hub, facilitating access to a wealth of literature and knowledge on various aspects of planetary health.

Throughout the second year, the utilisation of the PLANETARY HEALTH TOOLBOX has continued to surge, with an increasing number of views and downloads. This trend underscores the growing recognition of the importance of planetary health and the value our TOOLBOX provides in consolidating relevant literature and resources in one accessible platform. The diverse range of topics covered within the TOOLBOX ensures its relevance to a broad audience, from policymakers and researchers to educators and activists. One of the key strengths of our TOOLBOX is its dynamic nature. Despite being in its second year, the TOOLBOX remains adaptable and responsive to emerging trends and developments in planetary health. Literature continues to be added, reflecting the evolving discourse and expanding knowledge base in this interdisciplinary field. This commitment to staying current ensures that our users can access the latest insights and research findings, empowering them to make informed decisions and drive positive change. The PLANETARY HEALTH TOOLBOX not only serves as a MEDBOX TOOLBOX but has also contributed to broader changes within the Institute. The Institute has recognised the urgency of planetary health issues and now provides a platform for dialogue, collaboration, and action. Establishing an internal Planetary Health Working Group signifies a deeper institutional commitment to integrating Planetary Health principles into our daily work and into the events organised by the Institute.

In conclusion, the second year of the PLANETARY HEALTH TOOLBOX has been marked by continued growth, impact, and relevance. As planetary health gains increasing social relevance and urgency, our TOOLBOX remains at the forefront, equipping individuals and organisations with the resources they need to address the interconnected challenges facing our planet and its inhabitants. Looking

ahead, we remain committed to expanding the reach and impact of our TOOLBOX, fostering a healthier, more sustainable future for all.

OUTREACH ACTIVITIES

We were represented at several events in 2023, either as speakers, participants, or with our MEDBOX booth.

Figure 13: The MEDBOX Lead attending the Humanitarian Symposium in Munich

28.01.; 06.05.; 07.10.
Introductory seminar, Practice-oriented presentation of the MEDBOX for doctors going abroad (Würzburg & virtual, Karla Deininger & Laura Liebau):

18.02.
Humanitarian Symposium, Lecture on gender-based violence and presentation of the MEDBOX category on sexual violence (Munich, Karla Deininger & Laura Liebau)

25.03.
Foring, The MEDBOX had a virtual room in the break sections where interested people could enter and interact (virtual, Laura Liebau)

05.09.
Planetary Health Summer School, Presentation of the MEDBOX with special focus on the PLANETARY HEALTH TOOLBOX (virtual, Laura Liebau)

09.-11.10.
Humanitarian Congress: Participation and network work (Berlin, Laura Liebau & Karla Deininger)

MEDBOX worldwide

In 2023, the founder of MEDBOX, Dr. Joost Butenop, was presenting MEDBOX to the Honourable Minister of Health in Sierra Leone, Dr. Austin Demby during a visit in Freetown. He also presented MEDBOX to the Honourable Minister of Health of The Gambia, Dr. Amadou Samateh

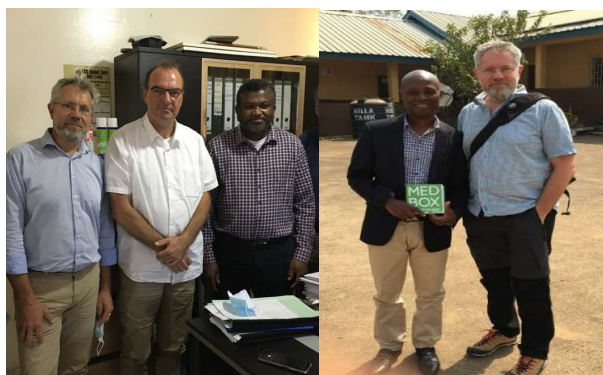*Figure 14: Discussing MEDBOX with DR. Austin Demy, Minister of Health of Sierra Leone in February 2023*

Figure 15: Discussing MEDBOX with Dr. Amadou Samateh, Minister of Health of The Gambia in July 2023

Fig 16: Introduction of MEDBOX at different Disrtrict Health management Teams in Sierra Leone

Formats designed by MEDBOX

02.05.; 30.08. Webinar WikiTropica: In 2023, we had the opportunity to design a webinar for the Tropical Medicine Institute in Antwerp. As part of two webinars for health librarians from Cambodia and Indonesia, MEDBOX was presented, and instructions for daily research with the database were explained

OUTLOOK

In 2024, we would like to expand our range of workshops and webinars. We aim to train healthcare workers with limited experience in research so that they can access the information materials they need with little difficulty and without having outdated, dubious literature. We hope to work in different regions worldwide and are open to suggestions from partners, funders, and others. In addition, the issue briefs are to be further expanded and, in particular, written in French, Spanish and English. The main topics will include NTDs and NCDs. Our users have received the Issue Brief concept very well. We are open to new suggestions for topics and look forward to receiving requests. Of course, we will launch new TOOLBOXES in 2024! The TOOLBOX on noncommunicable diseases is to be further expanded and launched. In the long term, the aim would be to make the TOOLBOX available in other languages such as Spanish, French and English. Furthermore, the realisation of a TOOLBOX on Malaria is planned.

PARTNERSHIPS

The MEDBOX Team would like to thank all our partners who have supported MEDBOX since the beginning. We always like to welcome new partners who would like to support us financially or with their expertise.

CONTACT

MEDBOX is brought to you by medmissio – Institute for Global Health. Feel free to contact us for further information at news@medbox.org

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MEDBOX – The Aid Library

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