The March to Mercury-Free Dentistry in Asian Nation



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Without a doubt, Asia and Asians are marching to mercury-free dentistry. The pathway varies by nation, but the pace is accelerating. Across this planet's most vast and most populous continent, the future of dentistry – the very near future – is no amalgam!

It is my great honor to work with outstanding Asian NGO leaders like Shahriar Hossain and Siddika Sultana in Dhaka, Satish Sinha in Delhi, DillipPattanaik in Bhubaneswar, Mahmood Khwaja in Islamabad, Ram Charitra Sah in Kathmandu, Gao Xiaoyi and Yao Lingling in Beijing, Lien To in Hanoi, Lillian Ebuen in Manila, Yuyun Ismawati in Bali, Naji Kodeih in Beirut, and Ziyad Al-Alawneh in Amman.

The Asian Center for Environmental Health, author of this report, has made a major mark in its short history on challenging toxins in general and mercury use in particular. This flagship NGO, working at the headquarters of Environment and Social Development Organization in Bangladesh, serves as combined think-tank, messaging center,

MESSAGES

CHARLES G BROWN PRESIDENT WORLD ALLIANCE FOR MERCURYFREE DENTISTRY

and coordinator of the myriad Asian projects for mercury-free dentistry.

The World Alliance for Mercury-Free Dentistry, with its Secretariat in Washington, launched this Asian initiative and remains committed to working closely with the governments and our civil society partners across Asia to end amalgam for children immediately, and to phase out all amalgam use on a date certain.



The Minamata Convention on controlling the use of Mercury is committed to the objective of restricting the use of Mercury in the world of 21st century to reduce its adverse effects on the planet earth. UN Environment / UNEP Global assessment address mercury toxicity to humans, wildlife and environment. The healthcare sector is a key source of mercury's global demand and emissions. The condition in Bangladesh regarding this matter is not different from the condition of the other parts of the world.

Today, authorities including the UN Environment, the US Food and Drug Administration (FDA), and the European Commission (EC) are actively taking part in programs for reducing health risks caused by the use of dental amalgam at present. Three European Union Institution (the European Parliament, European Commission and the Council of the European Union) have agreed to enact a ban on dental amalgam fillings used for children under 15 as well as for pregnant and breastfeeding women which takes effect on July 1, 2018.

SYED MARGHUB MURSHED CHAIRPERSON ESDO

Asian Center for Environmental Health in collaboration with ESDO and the World Alliance for Mercury-Free Dentistry have been working diligently for long with an aim to phasing out mercury dental amalgam from Asia. A number of Asian countries have already made progress in stopping the use of mercury for dental fillings. The report entitled 'The March to Mercury-Free Dentistry in Asian Nations' reflects the advancement of the Asian campaign as the largest region. Result oriented actions of different NGO's and associations are highlighted here. The active guidance of the advocate Charlie Brown and Dr. Shahriar Hossain has enabled ESDO's researchers to prepare this comprehensive report.

We, at ESDO believe that the report can give readers a quick view of the status of Asian campaign and progress and to help promote the global movement for "Mercury-Free Dentistry".



Asian Center for Environmental Health is opening a pathway to work closely with environment. This is a new initiative of building a network among the countries of Asia in environmental issues. Presently, Asian countries are working together to make Asian nations adoptable to effective amalgam phase out strategies. Since the foundation of this center, it has been making assiduous efforts in association with ESDO and World Alliance for Mercury-Free Dentistry.

As of today in 2017, we can now present our joint efforts to the world. We, the Asian nations have come up with some major achievements towards mercury-free dentistry in Asia. This report is a representation of the position of some Asian countries about this global campaign. The current situation, the major initiatives that have been taken by the NGOs and other institutions and the resulted achievements are focused in this report.

We hope that we can set national plan of action targeting the phase out of dental amalgam in Asia by 2020 depending on country situation. This

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report can help to plan how we can move forward to achieve our target.

As the Director of Asian Center, I wish its gradual advancement build networks, awareness and governance on environmental health issues across the Asia. At the same time, I want to express my sincere gratitude to the President of World Alliance, Mr. Charlie Brown and Executive Vice President of World Alliance, Dr. Shahriar Hossain and leader of Asian NGOs. Their continuous guidance and wonderful co-ordination make all these results achievable.

South Asia

Countries



South East Asia Countries **INDIA CHINA** BURMA **LAOS** Naypyidaw Philippines Philippine Sea Vietiane Bay of Bengal **VIETNAM** South **Bangkok** China Sea **THAILAND** Phnom Andaman Sea Penh **CAMBODIA** Sulu Sea **Bandar Seri** Begawan North Pacific Ocean **BRUNEI** Celebes Sea Kuala Lumpur **SINGAPORE INDONESIA** Banda Sea Java Sea Dili Indian Ocean **Jakarta EAST TIMOR** Timor Sea **AUSTRALIA**



EXECUTIVE SUMMARY

World Alliance for Mercury-Free Dentistry, the international coalition of organizations from six continents, is dedicated to ending dental mercury use. This global campaign now focuses on three main targets, which include stopping dental amalgam to nursing mothers and children by 2018, phasing out mercury amalgam by 2020 and bringing modification in dental school/college curriculum based on country situation by 2020. Asian NGOs gathered at a summit in Dhaka in 2014 and adopted the *Dhaka CSO Declaration* for Mercury Free Dentistry in Asia. The summit was a turning point of this campaign in Asia. The Asian countries came forward hand in hand with civil society organizations, dental professional organizations, dental institutions and government. This report contains the achievements of Asia following the collective decision of the summit.

In Bangladesh, the professionals body Bangladesh Dental Society-BDS made an announcement of phasing out dental amalgam use in the country by 2018. More than 1000 dentists and 7 dental colleges and units declared themselves as mercury-free dental practinioners and institutions

resepectively. The Bangladesh Army Dental Corpsis phasing out use of amalgam, already having reduced its use by 90%. Some dental colleges are entirely amalgam free – in instruction and in their clinics. Dental amalgam has been listed as a high-risk and toxic product in China by Ministry of Environmental Pollution. Peking University Dental College and Hospital of China are completely free of mercury in terms of both academic and treatment purpose since 2015. In India, the momentum toward mercury-free dentistry is substantial. Dental curriculum changes downgraded proficiency in amalgam and upgraded proficiency in alternatives. The Armed Forces Dental Services declared the ban of amalgam use in 2016 for the Army, Navy, and Air Force. Indian Railway Hospitals scaled down the use of dental amalgam by 90%. In the eastern state of Odisha, the "model state" for mercury-free dentistry, a conference of most eastern Indian states addressed how to phase out amalgam. Dental hospitals and dental colleges have gone amalgam-free, and 458 dentists pledged themselves to practice mercury-free dentistry. Government involvement is remarkable in



Indonesia, which has a pilot program for mercuryfree hospitals, including mercury-free dentistry, in 10 hospitals. Nepal's route to mercury-free dentistry is happening via import and purchase restrictions and, ultimately, phase out. Kathmandu University has implemented curriculum changes. In Pakistan, several research projects demonstrated the workplace dangers of amalgam to dental workers, especially in hospitals. After this research was published into landmark articles, hospitals began a conversation to mercury-free dentistry. In Philippines the Department of Health and the Department of Environment and Natural Resources are closely coordinating a campaign with civil society to add amalgam to the regulation that phases out mercury in other medical devices. Several dental colleges are already amalgam free. Vietnam's dental professional body, Odonto-Stomatology Association (VOSA) passed its recommendation to phase down amalgam use in children under 15 years old, pregnant and breastfeeding women by 2018 and in general public by 2020. This year they have stopped mercury use in School of Odonto Stomatology and declared as a mercury-free dental school as well as hospital. To implement the phasing down of amalgam, the government of Thailand is working closely with the UN Environment and WHO offices in Bangkok and with the World Alliance for Mercury-Free Dentistry. At its 2017 meeting in Bangkok, the South East Asia Regional Office of WHO agreed to begin the phasedown in use of amalgam throughout the region.

All of the above nations held national or regional stakeholder conferences to plan the transition to

mercuury-fee dentistry, in addition to the specific steps discussed in this report.

Participating organizations of World Alliance working in Asian countries are:

- Environment and Social Development Organization-ESDO (Bangladesh)
- All China Environment Federation-ACEF (China)
- Toxics Link (India)
- Orissa State Volunteers and Social Workers Association-OSVSWA (Odisha, India)
- BaliFokus (Indonesia)
- Land and Human to Advocate Progress-LHAP (Jordan)
- IndyACT (Lebanon)
- Center for Public Health and Environmental Development-CEPHED (Nepal)
- Sustainable Development Policy Institute-SDPI (Pakistan)
- Center for Community Health and Injury Prevention-CCHIP (Vietnam)
- Ecowaste Coalition with World Alliance for Mercury-Free Dentistry (Philippine)

Considering the significant progress that has been made by the Asian countries, and the close working relationship of the governments, the dental profession, and the environmental NGOs we believe that the complete elimination of dental mercury in Asia will be in place, depending on the country perspective, within a timeline of 2020-2022.



BACKGROUND

Asian Center for Environmental Health, in collaboration with ESDO and the World Alliance for Mercury Free Dentistry, have been working diligently for a long time to phase out mercury dental amalgam from Asia. The Asian Center is dedicated to building a toxic chemical free and safe environment for future generations.

The Asian Center for Environmental Health was founded by the Environment and Social Development Organization-ESDO (headquartered in Dhaka, Bangladesh) and the World Alliance for Mercury-Free Dentistry (headquartered in Washington, DC, USA) on 28th December, 2013. It intended to serve the entire Asian region, to work with and welcome input from international agencies, national and local government,

academic institutions, and the breadth of civil society.

The Asian Center is advancing by creating an Asian network in the countries of:

- Bangladesh
- China
- India
- Indonesia
- Jordan
- Lebanon
- Nepal
- Pakistan
- Philippines
- Vietnam

All the designated organizations of the above countries continue their campaigns with the

support of World Alliance and Asian Center.

Campaign materials (for example, Information, Education and Communication (IEC) materials) are continuously being produced and disseminated.

Social media campaigns and mobile campaigns are the other forms through which the issue is spreaded all over the Asia.

UN Environment's global assessment on mercury report assesses mercury as toxic to humans, wildlife and environment. Mercury is a neurotoxin which poses threats to human health due to its global diffusion, persistence, toxicity and bioaccumulation. The healthcare sector is a key source of mercury's global demand and emissions and the dental sector alone accounts for very high usage.

The Minamata Convention on Mercury describes the provisions for mercury-added products. including mercury amalgam. Each nation must phase down the use of dental amalgam; they may phase it out altogether if they choose. Effective steps include setting national objectives aimed at minimizing amalgam use; promoting mercury-free alternatives, revising dental school curriculum and training to emphasize mercury-free dentistry, changing government programmes and insurance to favor alternatives, and building consumers' awareness that the best environmental choice is pollution-free (mercury-free) dentistry. A major development in dentistry in recent years is the development of effective and affordable clinical alternatives to amalgam, permitting entire institutions – such as dental schools, hospitals, and armed forces to move en masse to mercury-free dentistry.

The World Health Organization (WHO) organized a workshop on "Health Sector Involvement in the Implementation of the Minamata Convention on Mercury" in Bangkok, 2017 where representatives of World Alliance were invited. Participants recommended a deadline of amalgam phase down by 2020.

Of particular note, a regional summit of NGOs in 2014 adopted the *Dhaka CSO Declaration of Mercury-Free Dentistry for Asia*. Another major outcome of the World Alliance, UN Environment in Asia and Asian Center is the Asian Workshop on "Successful Strategies to Phase Down Amalgam Use Towards Mercury Free Dentistry" in 2016 in Bangkok, Thailand. Theworkshop took a strategic approach to prepare both regional and national level action plans to phase down/phase out dental mercury amalgam from Asian countries.

An NGO summit was also organized where NGO representatives of 9 countries including Bangladesh, India, Pakistan, China. Nepal, Indonesia, Philippines South Africa, and USA participated. A joint declaration was released where NGOs urged the Asian nations to phase out dental amalgam by 2020.

As of now, the Asian countries are continuing their efforts to reach their goal following their respective national action plans. Different approaches are being taken as per different country situations. This summary report contains the current status of the mercury-free dentistry movement in Asia, major successes and significant initiatives taken by the World Alliance member organizations, dental professional organizations and the national government agencies.



SIGNIFICANT SUCCESS AND ACHIEVEMENT BY COUNTRY



BANGLADESH

The World Alliance for Mercury-Free Dentistry initiated its campaign in Bangladesh in 2010. Environment and Social Development Organization-ESDO is the pioneer organization to deliberately work on this issue since the beginning. Under the umbrella of Asian Center, the campaign started to expand its magnitude. Incessant efforts in terms of awareness raising campaigns, policy advocacy and action-based research brought some significant outcomes in Bangladesh. The overall use of dental amalgam has been reduced by about 75% as a result of the endeavor. The national dental association, Bangladesh Dental Society, is working side by side with ESDO and recently made an announcement to stop dental amalgam use in Bangladesh by 2018. Also, a large group of academicians of different dental colleges are united and simultaneously running the mercury-



free dentistry movement in Bangladesh. Another noteworthy advancement is the Bangladesh Army Dental Core lessened the use of dental amalgam by about 90%. More than 1000 dentists have already pledged them as mercury free dental practitioners. In addition, 7 dental colleges and units have declared them to be mercury free dental institutions. So it is comprehensible that it is not far when Bangladesh will be free of mercury in dentistry sector.

DEVELOPMENT AT A GLANCE:

CURRENT SITUATION OF MERCURY-FREE DENTISTRY MOVEMENT:

ESDO and Asian Center are continuing policy advocacy to ban the use of dental

- amalgam in children and women and to phase out its trade. A petition has been submitted requesting a regulation by the Government to ban amalgam for children and for pregnant women as well as nursing mothers in 2018, and to phase out the trade of amalgam in 2020.
- Modification in the dental curriculum will be proposed very soonjointly by ESDO, Asian Center and Bangladesh Dental Society (BDS) to the Center for Medical Education.
- A good number of dentists are already in favor of mercury-free alternatives and they are motivating other dentists to shift.

MAJOR SUCCESSES OF MERCURY-FREE DENTISTRY MOVEMENT:

- ✓ Use of mercury dental amalgam reduced upto 75% in Bangladesh
- ✓ Bangladesh Dental Society announced to phase out dental amalgam use in Bangladesh by 2018
- ✓ Submitted petition to the Honorable Minister of Ministry of Environment and Forests, Government of Bangladesh for complete ban of amalgam trade in Bangladesh by 2020
- ✓ National level alliance with Bangladesh Dental Society
- ✓ Joint initiatives with Army Dental Core and Director Medical Services

- ✓ As a result, Bangladesh Army Dental Core reduced amalgam use by about 90% in their treatment
- More than 1000 dentists pledged themselves as mercury-free dentists
- √ 7 dental colleges and units declared as mercury-free dental institutions

SIGNIFICANT INITIATIVES BY PARTNER ORGANIZATION AND OTHER RELEVANT INSTITUTIONS:

- Signing MOU with Bangladesh Dental Society to work together for mercury-free dentistry
- Started joint initiative with Bangladesh Army Dental Core
- Submitted joint petition to the Honorable Minister of Ministry of Environment and Forests, Government of Bangladesh for complete ban of amalgam in Bangladesh by 2020
- Questionnaire survey to different dental colleges and dental units of Bangladesh on dental amalgam use
- Several meetings with academicians of different dental colleges and dental units all over Bangladesh
- Organized Asian Summit and Asian Workshop jointly with World Alliance and UN Environment in Bangkok, Thailand



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INDIA

The World Alliance initiated the mercury-free dentistry campaign in India in collaboration with Toxics Link in 2015. Great achievements have been made so far. Post Graduate Dental curriculum changes have been approved by the ministry and legal documents are being prepared. Amalgam usage in final year and second year of dental curriculum will change. A significant outcome that can be noted is that Armed Forces Dental Services declared the ban of amalgam use in 2016. Also, recently the Indian Railway Hospitals scaled down the use of dental amalgam by 90% which is very promising for the global campaign. The World Alliance also collaborated with Orissa State Volunteers and Social Workers Association (OSVSWA) and initiated the global campaign in Odisha, which is a state of Eastern India, in 2012. As a result of continuous efforts, Odisha has been raised as the first State in India to practice mercury-free dentistry. Already 458 dentists pledged themselves to practice mercury- free dentistry in Odisha state. National Alliance for Mercury Free Dentistry has been initiated to focus only on this issue, which is continuing its works to reach the target.





DEVELOPMENT AT A GLANCE:

CURRENT SITUATION ABOUT MERCURY-FREE DENTISTRY MOVEMENT:

- * Toxics Link is pushing for a policy to ban the use of dental amalgam in children and women. A white paper document has been prepared and shared with Ministry of Health and we are following up on that.
- As of now the process of discussion is ongoing and ratification may take some time.
- Changes in the dental curriculum as proposed by Toxics Link have been agreed upon by the DCI and will be incorporated soon in the syllabus.
- A National and State level dental associations are very much in the favor of shifting to mercury-free alternatives as they are dealing with the problem of mercury disposal at the college level. The majority of the dentists in private practice have already started to shift to amalgam free alternatives like composites and GIC (glass ionomer cements).
- Dental council of India has agreed on bringing about the changes in the curriculum to phase out the dental amalgam usage eventually.

MAJOR SUCCESSES OF MERCURY-FREE DENTISTRY MOVEMENT:

PG (post graduate) Dental curriculum changes have been approved by the ministry and legal documents are being prepared. Amalgam usage in final year and second year of dental curriculum will change.

- ✓ Armed Forces Dental Services declared the ban of amalgam use in 2016.
- ✓ Indian Railway Hospitals scaled down the use of dental amalgam by 90%.

IN ODISHA:

- Odisha has been established as the first State in India to practice mercury-free dentistry.
- Recently four institutes including 2 dental colleges have agreed to practice mercuryfree dentistry.
- √ 458 dentists pledged themselves to practice mercury-free dentistry in Odisha state.
- ✓ Odisha State Commission for Protection of Child Right (OSCPCR), Government of Odisha has initiated policy for complete ban of mercury amalgam uses on children.
- ✓ Bhubanewar, Cuttack and Berhampur Municipal Corporation have agreed to publish notification in August 2017not to connect with the municipal / public drains for clinic wastes to all the Dental Clinics in there Municipal Area.
- ✓ Significant reduction of use of mercury amalgam in cities.
- ✓ The State Mahila Commission (Women Commission), Government of Odisha

- agreed to start a policy dialogue for a complete ban of mercury amalgam on nursing and pregnant women.
- Letters has been submitted to the State Ministers (Environment and Health) and Secretaries for complete ban of mercury amalgam in their respective states.

SIGNIFICANT INITIATIVES BY PARTNER ORGANIZATION AND OTHER RELEVANT INSTITUTIONS:

- A national level mercury estimation survey is under progress to understand the overall usage of dental amalgam usage in India and to devise strategies for reduction of the same.
- A survey of dental amalgam manufacturers is being done to understand the demand and supply of dental amalgam and to develop strategies to shift the demand towards mercury- free alternatives.
- A survey to address the unregulated quackery sector and its usage of dental amalgam is also being conducted.
- A survey of dental colleges to estimate the usage of mercury in college set up to understand the problems associated with its disposal has been conducted.



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PAKISTAN

Sustainable Development Policy Institute (SDPI) in Pakistan has been working on the issue since 2013. They mainly focused on research works. Several publications are in place which highlight mercury exposure in workplaces, especially by dental amalgam use. Research has also been conducted on mercury amalgam use in private dental clinics of Pakistan. Other than this, the Minamata Initial Assessment project is run by the government of Pakistan.



DEVELOPMENT AT A GLANCE:

CURRENT SITUATION OF MERCURY-FREE DENTISTRY MOVEMENT:

- Held meetings at Pak.EPA, provincial EPAs and ministry of climate change and discussed issues related to hazardous substances, especially mercury and wastes/wastes sites.
- Continued technical support and inputs towards Pakistan position for Minamata Convention on mercury and hazardous chemicals.
- Continued interactions with PMDC, provincial health departments, HEC, and MoH, regarding review and revision of BDS curriculum offered at dental teaching colleges in the country.

MAJOR SUCCESSES OF MERCURY FREE DENTISTRY MOVEMENT:

Research Journal on "Mercury Exposure At Work Place And Human Health: Dental Amalgam Use In Dentistry At Dental Teaching Institutions And Private Dental Clinics In Selected Cities Of Pakistan"

- Publication on "Environmental Health Threats and Challenges of Mercury Amalgam Use in Pakistan Health Sector."
- Publication (under review) on "Regulating Mercury Amalgam Use at Private Dental Clinics in Pakistan.
- Research report on "Assessment of Mercury Amalgam Use at Private Dental Clinics In Selected Main Cities of Pakistan," 2015

SIGNIFICANT INITIATIVES BY PARTNER ORGANIZATION AND OTHER RELEVANT INSTITUTIONS:

- Awareness workshop on "Minamata Initial Assessment & Training on Inventory of Mercury and Mercury Compounds In-Products in Pakistan" with remarkable government involvement.
- Presented papers on "Mercury Added Products" across the country, during six MIA consultation and awareness raising workshops in provincial capitals and main cities.



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NEPAL

Center for Public Health and Environmental Development (CEPHED), an environmental NGO of Nepal, has been working on mercury-free dentistry since 2014. Import, purchase and use of mercury-based equipment has been banned in Nepal. One of the leading universities, named Kathmandu University, has already made some changes in the curriculum and implemented it. There are about six Dental Colleges under this university.Nepal has come to develop a city named Bharatpur Medical City as the first Mercury-Free Medical City of Nepal. Nepal Dental Association is closely working to end amalgam use in the country.



DEVELOPMENT AT A GLANCE:

CURRENT SITUATION OF MERCURY-FREE DENTISTRY MOVEMENT:

- Ban on import, purchase and uses of mercury-based equipment in health sectors, but not including dental amalgam specifically.
- Government is not very much predictable regarding mercury free dentistry.
- Kathmandu University has already made some changes in the curriculum and implemented it. There are about six Dental College under this University.
- Nepal Dental Association (NDA) is positive towards the phase down of dental amalgam.

MAJOR SUCCESSES OF MERCURY FREE DENTISTRY MOVEMENT:

✓ Import, purchase and uses of mercurybased equipment in health sectors has been banned. Though this particular ban did not explicitly mention mercury-free dentistry, it has great impacts on reduction of use of mercury dental amalgam.

SIGNIFICANT INITIATIVES BY PARTNER ORGANIZATION AND OTHER RELEVANT INSTITUTIONS:

CEPHED is starting a new project entitled "Reduction of POPs and Mercury through awareness raising, helping set up of CTF and Policy Influences" under the UNDG GEF SGP project for two years, under which a large portion of activities are given below:

- Comparative study of dental school curriculum with respect to the dental amalgam related issues, theory and practice.
- Publication on a fact sheet onmercury andthe Mercury Convention, including mercury-free dentistry.
- Celebration of World Oral Health Day jointly with NDA Chitwan Branch to maximize outreaches and awareness about mercury-free dentistry.
- > Awareness raising and capacity building.
- Training on mercury-free dentistry for all dental doctors and dental colleges in Bharatpur city, Chitwan.
- > Initiative of curriculum revision.
- Develop and declare the Bharatpur Medical City as the first Mercury-Free Medical City of Nepal.



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CHINA

All China Environment Federation (ACEF) in China collaborated with the World Alliance and started their mercury-free dentistry campaign in 2015. A very good sign of progress was that China ratified the Minamata Convention on Mercury in 2016. Dental amalgam has been listed as a restricted category, while the development and application of alternatives for mercury-added products has been listed as a promoted category according to the Guiding Category List for Industrial Structure Adjustment 2011 by National Reform and Development Commission. Also, Dental amalgam has been listed as a high-risk and polluted product according to the "Comprehensive Product Category List for Environmental Protection 2014" by Ministry of Environmental protection. Chinese government and experts are working to completely phase out dental amalgam from their country. Peking University and Dental College and Hospital of China are completely free of mercury in terms of both academic and treatment purpose.



DEVELOPMENT AT A GLANCE:

CURRENT SITUATION OF MERCURY-FREE DENTISTRY MOVEMENT:

- No formal policy (regulations) specifically on dental amalgam phase out, however, several regulations and government guidance document have mentioned the restriction on dental amalgam.
- Dental amalgam has been listed as a restricted category, while the development and application of alternatives for mercury-added products has been listed as a promoted category according to the Guiding Category List for Industrial Structure Adjustment 2011 by the National Reform and Development Commission;
- Dental amalgam has been listed as a highrisk and polluted product according to the "Comprehensive Product Category List for Environmental Protection 2014" by Ministry of Environmental Protection.

MAJOR SUCCESSES OF MERCURY-FREE DENTISTRY MOVEMENT:

- Networking with key stakeholders including both the Chinese government (Foreign Economic Cooperation Center, Ministry of Environmental Protection) and experts working on dental-amalgam/mercuryadded products;
- Participation in Asian NGO Summit Towards Mercury-Free Dentistry,
 "Successful Strategies to End Use of

- Dental Amalgam in Asia" and Asian Workshop on "Successful Strategies to Phase Down Amalgam Use towards Mercury Free Dentistry" in 2016
- Sharing and reporting the current status and efforts that the Chinese NGO has made to phase down dental amalgam;
- Submitting policy recommendations and national work plan recommendations to the Chinese government;
- Peking University Dental College and Hospital have mercury-free academic set of courses and they provide mercury-free treatment.

SIGNIFICANT INITIATIVES BY PARTNER ORGANIZATION AND OTHER RELEVANT INSTITUTIONS:

- Carrying out baseline study on status quo of dental amalgam use in China and the previous efforts China has made to phase down dental amalgam in 2015-2016;
- Outreach and dissemination at INC7 in 2016 about Chinese Environmental NGO's efforts to phase down dental amalgam use:
- Hosting "Multi-stakeholder Workshop on Phasing Down Amalgam Use towards Mercury Free Dentistry in China" in September 2016;
- As a Chinese Environmental NGO, ACEF supported a joint declaration released by Asian Center for Environmental Health to urge Asian Nations to phase out dental amalgam by 2020.



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INDONESIA

Balifokus, an Indonesian non-government organization, started the global campaign with the World Alliance in 2014. The issue has been socialized with the Indonesian people. A donation of mercury- free medical equipments was made to 10 hospitals of Indonesia. Government also collaborated with them to implement a pilot program with 10 hospitals in the country.

DEVELOPMENT AT A GLANCE:

CURRENT SITUATION ABOUT MERCURY-FREE DENTISTRY MOVEMENT:

- Indonesia has no regulation or technical document yet that regulates the use of dental amalgam, but the MoH and National Dentist Association (PDGI) support the campaign to phase-down the use of dental amalgam.
- Ministry of Health Decree No. 118 year 2014 (on page 83) recommended the using of GIC instead of dental amalgam.

MAJOR SUCCESSES OF MERCURY-FREE **DENTISTRY MOVEMENT:**

- Some Faculties of Dentistry have eliminated the use of dental amalgam in the curriculum
- The National Dental Association pushed the phase down of Mercury on dental amalgam by 2020
- The Young Dentists Society has committed to phase out the use of dental amalgam

SIGNIFICANT INITIATIVES BY PARTNER ORGANIZATION AND OTHER RELEVANT **INSTITUTIONS:**

- Socializing the issue.
- Arranging preliminary survey
- Handed over a donation of mercury-free medical equipments to 10 hospitals
- Collaborated with the Government of Denpasar to implement a pilot program with 10 hospitals in Denpasar city
- Conducted mercury spills handling training to the hospital staffs



Bali Fokus

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PHILIPPINES

A mercury-free dentistry campaign has been initiated in Philippines by World Alliance in 2013. Dr. Lillian Ebuen works hard on the issue being the representative of World Alliance South East Asia. Contribution to policy changes pertaining to dental mercury use have been made so far. Policy recommendations have been taken into account and are included in the draft of a revised government regulation on dental mercury. Trainings are also being given on mercury-free dentistry, which also includes training on proper dental amalgam removal and proper wastes disposal.



DEVELOPMENT AT A GLANCE:

CURRENT SITUATION OF MERCURY-FREE DENTISTRY MOVEMENT:

- The EMB-DENR is currently finalizing its revised Chemical Control Order (CCO) on Mercury.
- The CCO is looking to set a strict time frame for the phase-down and phase-out of dental amalgam.
- Although the national government is still yet to sign the Minamata Convention, several government departments (particularly the DENR and the DOH) are supportive of the initiative to phase-out dental mercury.
- Currently, the resolution to phase-out the use of dental amalgamremains to be discussed and approved by present officers and the rest of the House of Delegates (HOD) before it is passed for strict compliance by members.

MAJOR SUCCESSES OF MERCURY-FREE DENTISTRY:

- Contributing to policy changes pertaining to dental mercury use.
- Policy recommendations have been taken into account and are included in the draft of a revised government regulation on dental mercury.
- A quick survey on dental amalgam use by the dental sector has been conducted and found that only a small percentage of Filipino dentists use amalgam.

SIGNIFICANT INITIATIVES BY PARTNER ORGANIZATION AND OTHER RELEVANT INSTITUTIONS:

- Dental Health Watch: Ongoing education and dental service campaign aimed to improving the overall dental health and awareness of Filipino children.
- Mercury Free Dental Trainings: Trainings are being given on mercuryfree dentistry, which also includes training on proper dental amalgam removal and proper wastes disposal.



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VIETNAM

The World Alliance and Asian Center initiated a mercury-free dentistry campaign in Vietnam with Center for Community Health and Injury Prevention (CCHIP) in 2016. The organization is dedicatedly working to achieve the goal of mercury-free dentistry in Vietnam. In line with their efforts, the government of Vietnam approved to join as a party of Minamata Convention, which means they support to phase down of dental amalgamin Vietnam. Vietnam'sdental professional body. Odonto-Stomatology Association (VOSA) released its recommendation to phase down amalgam use in children under 15 years old, pregnant and breastfeeding women by 2018 and in general public by 2020. This year they have stopped mercury use in School of Odonto Stomatology and declared as a mercury-free dental school as well as hospital.



DEVELOPMENT AT A GLANCE:

CURRENT SITUATION OF MERCURY FREE DENTISTRY MOVEMENT:

- Government of Vietnam approved to join as a party of Minamata Convention, meaning they support the phase down of dental amalgam.
- Vietnam Odonto-Stomatology Association (VOSA) supports the phase down towards phase out of mercury dental fillings in Vietnam, especially phase out in using amalgam fillings for children and pregnant/ breastfeeding women.

MAJOR SUCCESSES OF MERCURY FREE DENTISTRY MOVEMENT:

- ✓ Vietnam Odonto-Stomatology Association (VOSA) released its recommendation to phase down amalgam use in children under 15 years old, pregnant and breastfeeding women by 2018 and in general public by 2020.
- School of Odonto Stomatology has stopped using mercury this year and declared as mercury-free dental school as well as hospital.
- ✓ Convinced dental professionals support the phase out of amalgam use in Asia.
- Raised public awareness about the truth of amalgam by communication and dissemination of information.

SIGNIFICANT INITIATIVES BY PARTNER ORGANIZATION AND OTHER RELEVANT INSTITUTIONS:

- Courted stakeholders' support for mercuryfree dentistry initiative in Vietnam.
- Formed a group of dentists who support mercury-free dentistry and will join us at next events, together with CCHIP to communicate to the other dentists in their areas to stop using amalgam.



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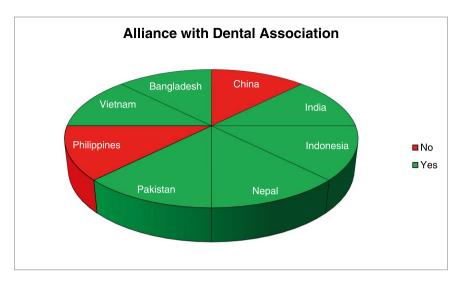


Fig: Status of alliance with respective dental association with network countries

It is seen from the chart that organizations of Bangladesh, India, Indonesia, Nepal, Pakistan and Vietnam have already built alliances with the respective national body of dental professionals. On the other hand, the rest of the countries could not come up with such alliances.

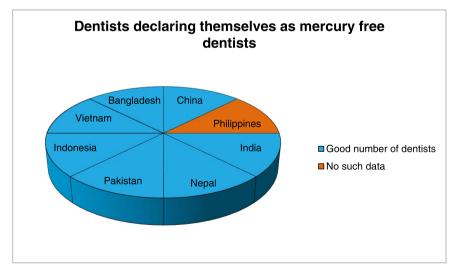


Fig: Presence of a declared group of mercury-free dentists in different countries

A large group of dental practitioners of Bangladesh, China, India, Nepal, Pakistan, Indonesia and Vietnam have already declared them as mercury free dentists. They use alternative restorative materials in dental treatment.



REGIONAL ASSESSMENT:

A quick regional assessment can be done based on the following points:

Alliance with dental association

Dentists declaring themselves as mercury-free dentists

Ratification and Implementation of Minamata Convention on Mercury

Government position

The present status of the network countries can be shown in some simple pie charts.

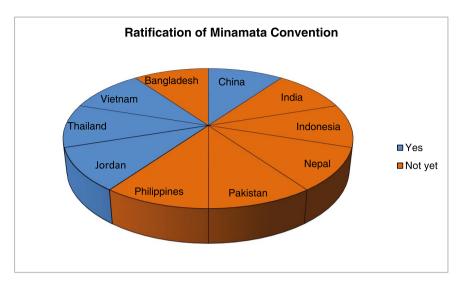


Fig: Countries whether ratified Minamata Convention or not

Among the Asian network countries, the China, Jordan, Thailand and Vietnam governments have already ratified the Minamata Convention. The rest of the countries – Bangladesh, India, Indonesia, Nepal, Pakistan and Philippines governments – are yet to ratify the convention.

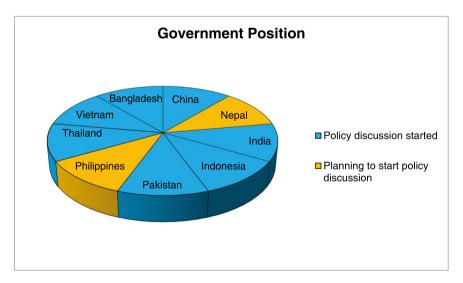


Fig: Condition of government position in terms of mercury free dentistry

The designated NGO representatives of Bangladesh, China, India, Indonesia, Pakistan, Thailand and Vietnam have started policy advocacy with their respective governments about elimination of mercury in the dental sector. It is being planned to start policy discussion in Nepal and Philippines.







CONCLUSION:

The Asian network countries should be steadfast to make efforts according to their respective action plans to achieve the goal of mercury-free dentistry. Some fruitful steps and initiatives can be suggested in this regard. Immediate ratification of the Minamata Convention is required. Combined participation of government and civil society can bring a good result to reach the goal of phasing out dental mercury amalgam by 2018 based on each country situation. Another way could be promotion and training on alternative restorative filling materials to dentists. A common objective of development of alternatives-friendly curriculum and study materials that facilitate the subsequent phase out of amalgam-related technology and practices should be met. A huge assembly of experts and relevant professionals can put forward some astute comments which can be incorporated into the countries' national action plans.



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