

# Harm Reduction Conference: Consensus Statement

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## DEFINITION

### Harm Reduction, Risk Reduction, Harm Minimization

In harm producing behaviors and clinical situations, the aim should be to achieve a harm free state but if the same is not possible immediately one should try to achieve realistic goals using the principles of harm minimization incorporating reduction of the concern risk or substituting it with available less harmful alternatives.

Harm reduction are realistic (not idealistic) interventions aimed at achievable goals and done to reduce the negative effects of health behaviors without stopping the problematic health behaviors completely. However, elimination should be the primary goal.

## ESTABLISHED HARM REDUCTIONS

### Vaccination

Vaccination is an established harm reduction strategy. The aim should be eradicating an illness (polio). If this is not possible, then reduce the burden in the society. Withholding vaccines from a child or an adult because of a hypothetical risk places them at risk for real infection that may have real sequelae. The benefits of vaccines are clear. Although the overall prevalence of complete vaccine refusal is <2%, vaccine refusal may result in vaccine-preventable disease in the individual and/or outbreaks of vaccine-preventable disease in unvaccinated and vaccinated individuals.

#### Recommendations

- World Health Organization (WHO) has listed vaccine hesitancy as one of the 10 threats to global health in 2019. Vaccine hesitancy should be addressed on priority at every level.
- Hepatitis B vaccine protects from hepatocellular carcinoma.
- Human papilloma virus (HPV) vaccine protects from HPV infection, a major cause of cervical cancer.
- Adult vaccination should also be addressed.

### Helmets, Seat Belts and Harm Reduction

Preventing head injuries by wearing a bicycle helmet reduces the risk of brain injury. A 2009 systematic review of five case-control studies found that helmets provide 63-88% reduction in the risk of head, brain and severe brain injuries and a 65% reduction of injuries to the upper and mid-face for bicyclists of all ages. Helmets provide similar protection for crashes involving motor vehicles and other causes (70%). In children (<15 years of age), wearing a helmet reduces the risk of head injury by 63% and of loss of consciousness by 86%.

### Pregnancy belt

Pregnant women should wear three-point seat belts during pregnancy. The lap belt is placed across the hips and below the uterus; the shoulder belt goes between the breasts and lateral to the uterus. Although there are case reports of maternal and fetal injuries resulting from seat belt use, the overall effect is that seat belts provide significantly more benefit than risk to the mother and fetus in the event of collision.

#### Recommendations

- Zero tolerance for not wearing helmets and seat belts.
- Govt. should be asked to bring in laws for mandatory cycle helmets, seat belts for back seat passengers, seat belt for bus drivers.
- Awareness should be created about quality of helmets.
- Children below <5 years old should not be allowed to sit in the front seat of a car. Car seats for children to be mandatory.
- In the back seat of a car, the middle seat should always have a seat belt as the person seated in the middle is most at risk.
- The importance of helmets and seat belts should be taught in schools.
- Children from schools in high risk areas should be made to wear helmets while crossing the roads.

**Mercury**

Going mercury-free is the need of the hour but as a harm reduction strategy on January 19, 2013 in Geneva, the world’s governments agreed to end the manufacture, import and export of all mercury-based medical devices— effectively phasing them out by 2020.

**Air Pollution**

WHO guideline stipulates that PM2.5 should not exceed 10 µg/m<sup>3</sup> annual mean, or 25 µg/m<sup>3</sup> 24-hour mean; and PM10 should not exceed 20 µg/m<sup>3</sup> annual mean or 50 µg/m<sup>3</sup> 24-hour mean. Each 10 µg/m<sup>3</sup> elevation in fine particulate air pollution was associated with approximately a 4%, 6% and 8% increased risk of all-cause, cardiopulmonary and lung cancer mortality, respectively. But the Indian standards has accepted PM2.5 (60) and PM10 (100) level as harm reduction strategy.

**Recommendation**

Try to achieve WHO targets for both outdoor (ambient) and indoor pollution, but if the same is not possible one should make all efforts to attain both outdoor and indoor pollution levels as low as possible, as much as possible and as soon as possible. Lower the better!

**Trans Fats**

The Food Safety and Standards Authority of India (FSSAI) has proposed to limit the maximum amount of trans fat content in vegetable oils, vegetable fat and hydrogenated vegetable oil to 2% by weight as part of its goal to make India trans-fat-free (<0.5%) by 2022. The current permitted level of trans fat is 5% in India.

In 2015, the food regulator set the maximum level of trans fatty acids at 5% in food products from 10% earlier. It directed that the level of trans fats in food products must be disclosed on the label.

The WHO has urged governments across the world to eliminate the use of trans fats from global food supplies by 2023.

**Recommendations**

- ▣ Aim at trans-fat free diet or reduce the amount of trans-fats in diet to the minimum possible.
- ▣ Clarified butter (ghee) is better than hydrogenated “Vanaspati” ghee.

**Coronary Artery Disease**

Bypass surgery and stenting are harm reduction procedures. These are mechanical solutions to a biochemical problem.

Aggressive risk factor harm is recommended in all patients with coronary heart disease even after surgical or stenting intervention.

This includes low-dose aspirin, reaching treatment goals for hypertension and serum lipids, avoidance of smoking, and, in patients with diabetes, controlling blood sugar.

In a follow-up study of 2,970 patients enrolled in the PREVENT IV trial, patients were assessed for the use of aspirin, β-blockers, angiotensin-converting enzyme (ACE) inhibitors or angiotensin receptor blockers (ARBs) and lipid-lowering agents after hospital discharge and at 1 year of bypass surgery. Patients taking ≤50% of these medicines compared with those taking all indicated medications after coronary artery bypass graft (CABG) had a significantly higher 2-year rate of death or myocardial infarction (8% vs. 4.2%).

**Recommendation**

Harm reduction by reducing all risks (lifestyle management + drug management)!

**Osteoarthritis Knee**

A dose-response relationship between the extent of percentage change in body weight and improvement in joint symptoms has been demonstrated, with more robust effects achieved when at least a 10% reduction in body weight is attained. A reasonable initial target is a 5-10% weight reduction within a 6-month period and initial goals should be reassessed periodically and individually for each patient.

**Recommendations**

- ▣ Reduction in body weight at least 10%.
- ▣ Strengthening exercises.

**Diabetic CKD**

**Recommendations**

- ▣ In diabetic CKD diet, ACE inhibitors, ARBs, SGLT2 inhibitors and L-/N-type calcium channel blockers can reduce the harm and proteinuria.

- ▣ Don't give excess protein. Give adequate protein as per body weight, otherwise protein calorie malnutrition may set in.

## HARM REDUCTION IN CLINICAL SETTINGS

### Type 2 Diabetes

Diabetes treatment itself is a harm reduction as diabetic complications can only be checked or delayed and not cured.

Most diabetics in uneducated society may not be able to do strict control of diabetes. Harm reduction involves some leniency in the sugar targets in selected groups.

- ▣ In fit persons with life expectancy of >10 years, A1c goal can be <7.5% (fasting and preprandial glucoses should be between 140 and 150 mg/dL).
- ▣ In elderly or with life expectancy <10 years, the goal can be ≤8% (fasting and preprandial glucoses between 160 and 170 mg/dL).
- ▣ In very old (frail patients unable to provide self-care), the goal may be <8.5%.

#### Recommendation

Strictness of control must be relaxed, especially for the chronically noncompliant patient, elderly and the illiterate patient.

### Obesity

It is not important to achieve an ideal weight. The medical aim is to reduce weight to prevent onset of diabetes in obesity. "A modest weight loss of 5-10% in 6 months is enough to delay or prevent the onset of diabetes and other obesity-related illnesses".

#### Recommendations

Any weight reduction is better than no weight reduction. Even 1 kg of weight loss is good for harm reduction.

### Pica

Pica is very common in India due to rampant iron deficiency anemia. Till iron is replaced these people require less harmful substitutes (taste, texture or smell). For example, for women who crave wet dirt, they can smell the wet dirt as they eat a burned toast. Chewing ice can also be a good substitute for dirt. For women who crave the crunch of cement, ice and hot chocolate

can be the alternative. For those craving the sour taste of baking powder, sour hard candies can work. Chewing gum substitutes well for the rubber from tires, unless the woman is craving the smell of the rubber.

#### Recommendation

Correction of iron deficiency anemia.

### Fatty Liver

Nonalcoholic fatty liver disease (NAFLD) is a common liver disease in India. Creating awareness is the main harm reduction strategy.

Heavy alcohol use is associated with hepatic steatosis and fibrosis. In a recent cohort study of 285 patients with NAFLD, nondrinkers were more likely to have improvement in steatosis, aspartate aminotransferase (AST) levels, and resolution of steatohepatitis compared with modest drinkers (≤2 drinks/day).

For those who do not want to stop alcohol, there is no safe amount of alcohol, one should lower the dose. Lower the better. Liver can metabolize 10 g of alcohol in 1 hour.

Modest weight reduction may improve liver function in nonalcoholic steatohepatitis (NASH), which is associated with insulin resistance and type 2 diabetes. Patients who are overweight or obese should lose 5-7% of body weight at a rate of 0.5-1.0 kg/week (1-2 lb/week) through lifestyle modifications including dietary therapy and exercise.

For patients with suspected or biopsy-proven NASH, the weight loss goal is higher (7-10% of body weight) in the first 6 months.

In nondiabetic patients with biopsy-proven NASH and fibrosis stage ≥2 vitamin E at a dose of 800 IU daily has been shown to reduce harm.

#### Recommendations

- ▣ Lose body weight; 5-10% of body weight.
- ▣ Physicians need to be aware about NAFLD as a disease entity.

### High Fever

Fever is temperature >100.4°F. Fever up to 104°F may not be treated in patients without comorbid conditions. But in patients with fever >104°F or with comorbid conditions rapid reduction of fever is harm reduction. Timely paracetamol and nimesulide can reduce the harm.

**Empirical Antibiotic**

In fever, till reports are available no antibiotic should be stated. But if the clinical situation compels to start an empirical antibiotic, then an older antibiotic like doxycycline can do the maximum harm reduction. Do not give antibiotics which are resistance prone.

**Recommendation**

Regulatory framework needs to be strengthened, including for e-pharmacy.

**HARM REDUCTION IN LIFESTYLE AND BEHAVIORS**

**Physical Activity**

Any activity is better than none. Health officials recommend that people get 150 minutes of moderate exercise per week, but some researchers argue that this recommendation may set the bar too high for some people, and that guidelines should instead focus on getting people to be just a little bit more active.

**Recommendation**

Some physical activity is better than none.

**Noise in Hospital Setting**

Hospitals are silent zones and require a noise level of 40 dB in night and 50 dB in day time. The same is impractical in today's date. As a harm reduction strategy several methods can be used to reduce night time noise exposure in the inpatient setting, including ear muffs or ear plugs for patients, sound masking (white noise), installing sound proofing acoustic materials and behavioral modifications ("quiet time" protocols). Patients report modest improvements in sleep with these relatively simple interventions.

Even small decreases in noise levels can improve subjective and observed sleep quality and duration.

**Recommendations**

- ▣ Reduce noise, especially unnecessary noise as much as possible.
- ▣ Reduce noise at source.
- ▣ Use ear plugs if noise cannot be avoided.
- ▣ Smart horns can be proposed to the government to reduce road noise.
- ▣ Enforce strict limits of volume and timings for loudspeakers.

**Salt Intake**

Reduce daily sodium intake to not more than 6 g of sodium chloride/day in persons with hypertension.

**Recommendations**

- ▣ Reduce salt intake as much as possible, lower the better.
- ▣ Preserved and packaged foods have maximum salt; reduce them as much as possible.
- ▣ Add only normal amounts of salt when cooking.
- ▣ Reduce or avoid added salt.
- ▣ Reduce salts in snacks.
- ▣ Use salt alternatives in food.

**Soft Drinks**

The consumption of soft drinks and other sweetened beverages (fruit drinks, sports drinks and energy drinks) should be discouraged. These beverages are a major source of added refined sugar and calories in the diet. Sugar-sweetened beverages are a key contributor to weight gain and obesity.

**Recommendations**

- ▣ Harmful: Fructose > sugar > brown sugar > Jaggery > sugarcane > honey
- ▣ Harmful: Artificial sweeteners > Stevia
- ▣ Harmful: Whole wheat > Wheat > sooji or broken wheat > Maida
- ▣ Harmful: White rice > Brown rice
- ▣ Harmful: Chasni Indian sweets (50% sugar) > Non-Chasni Indian sweets (30% sugar) > soft drinks (12% sugar) > sports drinks (6% sugar) > ORS (2% sugar)
- ▣ Reduce sugar sweetened beverages (contain high-fructose corn syrup), caffeine or quinine energy drinks and processed fruit drinks (contain high sugar).
- ▣ Avoid sticky, sugary, fermented foods as they are bad for teeth (dental caries, periodontal disease).
- ▣ Rinse mouth/immediately after eating any sweet-meat.

**Alcohol Disorder**

Abstinence is the best solution but not every individual will be able to achieve this and they may be put on controlled drinking to reduce risk to patients. There is no limit for controlled drinking, lower the

better. Restrict to minimum amount for least days in a week.

Controlled drinking is more likely for people with a mild disorder (or at-risk drinking) and may not be a more severe disorder.

In nonpregnant women and patients without other comorbidities the ideal dose of alcohol for mortality benefit is around 6 g (about one-half of a standard drink) per day. The dose associated with lowest mortality was lower in women than men (4 g/day and 6-7 g/day, respectively).

#### Recommendations

- No amount of alcohol is safe.
- Harmful: Whisky > white wine > red wine > beer > mead (3% alcohol or honey water).

#### Substance Disorder

Bystander-administered naloxone by the intramuscular and intranasal routes is used successfully to resuscitate opioid overdose patients. Providing opioid users, family members, and friends with naloxone, accompanied by teaching them how to recognize opioid toxicity, may reduce overdose mortality. Following implementation of a comprehensive opioid overdose prevention program that included take-home naloxone, overdose deaths decreased from 46.6 to 29.0 per 1,00,000. Prescription of naloxone can be given to third parties (bystanders) as part of a harm reduction program.

In street homeless persons, restrictive or punitive policies toward the use of alcohol and/or illicit drugs has not been the solution. Harm reduction programs, such as methadone clinics, needle exchange programs, and safe injection sites, often serve as an alternative health care system for homeless persons with substance use disorders.

#### HIV Harm Reduction

For all patients at risk for human immunodeficiency virus (HIV) infection, advise consistent condom use. Harm risk reduction counseling reduces behaviors that results in higher risk of HIV infection. Individuals report greater condom use and fewer sexual partners with behavioral risk-reduction interventions.

For IV drug users, harm reduction interventions, such as voluntary opioid substitution therapy and needle exchange programs can reduce risky injection behavior. These strategies are associated with decreases in HIV infection.

Screening and treat sexually transmitted infections (STIs) in individuals at risk for HIV given the shared risk factors for HIV and other STIs, the association of other STIs with HIV infection, and the benefit of treating STIs beyond potential HIV prevention.

For those who have high ongoing risk for HIV infection, daily pre-exposure prophylaxis with tenofovir-emtricitabine effectively reduces the risk of infection.

For those who have had a mucosal or parenteral exposure to HIV within the prior 72 hours, post-exposure prophylaxis with an antiretroviral regimen is associated with a reduced risk of infection.

Circumcision has demonstrated efficacy in reducing the risk of HIV infection among heterosexual men. WHO and the Joint United Nations Programme on HIV/AIDS (UNAIDS) recommend scaling up voluntary male circumcision as a HIV prevention intervention in several African countries with high rates of HIV and low baseline rates of male circumcision. In the United States and Europe, where sexual transmission among men who have sex with men (MSM) is dominant, circumcision has not demonstrated substantial benefit.

Mother-to-child HIV-1 transmission occurs *in utero*, peripartum, and postnatally via breastfeeding; the risk of HIV transmission to the infant can be significantly reduced with antiretroviral medications. Replacement feeding is recommended for infants born to HIV-infected mothers in the resource-rich settings. However, in resource limited settings replacement feeding is associated with greater infant morbidity and mortality from diarrheal disease, pneumonia and other infectious diseases. Exclusive breastfeeding, in combination with antiretroviral interventions, is recommended for the first 6 months of life and subsequently, breastfeeding, along with antiretroviral treatment (with support to encourage adherence during breastfeeding) and appropriate complementary feeding, should continue up to 24 months or longer.

#### Recommendations

- Abstinence from activities that increase the risk of HIV infection.
- However, if one can't exercise abstinence they should use condom to prevent/reduce harm or go for pre-exposure prophylaxis.

#### Tobacco Harm Reduction

Tobacco products, primarily combustible cigarettes, are the single greatest avoidable cause of tobacco-related

diseases and kill about 7 million people worldwide each year. The tobacco epidemic in India has also reached alarming levels. As per the latest estimates, there are nearly 106 million people in India who smoke tobacco, 200 million use chewing or smokeless tobacco (SLT) and 32 million who smoke as well as chew tobacco. India is home to roughly 12% of the smokers in the world and close to a million people in the country die every year due to tobacco-related illnesses.

The indirect and direct costs of tobacco-related illnesses and deaths in India are also staggering. As per a report by the Ministry of Health & Family Welfare, Government of India—the total economic costs attributable to tobacco diseases in India in the year 2011 for persons aged 35-69 was Rs. 1,04,500 crores (around US\$22.4 billion).

**Tobacco cessation treatment is a standard component of health care**

Cigarette smoking is a chronic relapsing substance use disorder. Current evidence strongly supports combining pharmacotherapy (slower acting and faster acting nicotine products) and other newer drugs with behavioral/psychosocial interventions as the most effective way to help smokers sustain abstinence.

In India, only slower-acting nicotine replacement therapies (NRTs) are available (patches, gum and lozenges) wherein, patches release more nicotine than gum and lozenges. Faster-acting NRTs such as nasal spray, sublingual tablets and oral inhaler are not available in India. It is important to note that both slower acting and faster acting NRTs are required in any cessation protocol. NRTs provide nicotine to reduce withdrawal symptoms.

**However, the available NRTs do not replicate the behavioral aspects of smoking and so have had moderate success in helping smokers quit.**

**Recommendation**

Among smokers who are unable to quit, reducing the amount of smoking may not help. Even at low-dose, smoking combustible tobacco may be harmful. The answer lies in switching to less harmful alternatives till one quits.

**Nicotine is not the same as tobacco**

- Tobacco contains nicotine but nicotine does not contain tobacco.
- Combustible tobacco is = nicotine + carbon monoxide (CO) + tar (a mix of over 4000 different chemicals produced out of oxidation

of the burnt tobacco many of them are Class I carcinogens).

- **Nicotine does not cause cancer.**
- NRT products are safe as cessation tools in heart patients.
- There are currently no rigorous scientific studies conducted on humans that demonstrate nicotine to be as or more dangerous than combustible smoking.

**What are ENDS?**

Alternative Nicotine Delivery systems (ANDS; electronic nicotine delivery systems (ENDS) are nicotine-based (non-tobacco) vaping products (produce aerosols and not smoke) that do not use combustion (no oxidation, no tar, no carbon monoxide [CO]. They can be considered equivalent to faster-acting NRTs. These can potentially deliver significant public health benefit if they help smokers to quit especially smokers who have not been willing or not been able to quit using current treatments.

**Vaping is not same as smoking**

Recently, many smokers have transitioned to vaping products in their efforts to quit combustible smoking or reduce harm created by the same. Vaping products contain heated nicotine as well as a variety of flavorings and other additives.

Vaping is not the same as smoking as no combustion takes place. Combustion from smoking generates significant level of tar, carbon monoxide and other chemicals out of which 69 are known carcinogens.

Second-hand smoking or passive smoking from combustion not only increases the risk of coronary heart diseases by 25-40% - almost the same level as a smoker, but also causes numerous health problems in infants and children, including more frequent and severe asthma attacks, respiratory infections, ear infections and sudden infant death syndrome. Third-hand smoking is another emerging threat associated with smoking!

**Vaping products on the other hand do not require combustion to deliver nicotine and as a result, do not generate harmful chemicals to the level of conventional cigarettes.**

A Juul study presented at the Society for Research on Nicotine and Tobacco 2019 annual meeting in San Francisco found **that ENDS reduce harmful exposure**

**to addictive nicotine and chemicals known to cause cancer and present a safe alternative to smoking.**

**Recently, the American Stroke Association (Abstract 9, Session A2) reported** that e-cigarette smokers may have higher odds of stroke, heart attack and coronary heart disease. As per the study, researchers tapped a database of 4,00,000 respondents. That database, the 2016 Behavioral Risk Factor Surveillance System (BRFSS) survey, collected data from residents in all 50 states about their health-related risk behaviors, chronic health conditions and use of preventive services.

Compared with non-users, e-cigarette users were younger, had a lower body mass index and a lower rate of diabetes. Some 66,795 respondents reported ever regularly using e-cigarettes. The control group was the 3,43,856 respondents who reported having never used e-cigarettes. Researchers found compared with non-users, e-cigarette users had: 71% higher risk of stroke; 59% higher risk of heart attack or angina; 40% higher risk of coronary heart disease **and double the rate of cigarette smoking.**

**As e-cigarette users had double the rate of cigarette smoking, it was not clear how much was cigarettes responsible for these findings.**

#### **Vaping vs. NRTs**

A study, published in January 2019 in the *New England Journal of Medicine*, found that e-cigarettes were nearly twice as effective as conventional nicotine replacement products like patches and gum, for quitting smoking. The success rate was 18% among the e-cigarette group, compared to 9.9% among those using traditional NRT.

The study was conducted in Britain and funded by the National Institute for Health Research and Cancer Research, UK. For a year, it followed 886 smokers assigned randomly to use either e-cigarettes or traditional NRTs. Both groups also participated in at least 4 weekly counseling sessions, an element regarded as critical for success.

#### **Is vaping less harmful than combustible cigarettes?**

**Public Health England:** *"Vaping poses only a small fraction of the risks of smoking and switching completely from smoking to vaping conveys substantial health benefits over continued smoking. The previous estimate that, based on current knowledge, vaping is at least 95% less harmful than smoking remains a good way to communicate the large difference in relative risk unambiguously so that more smokers are encouraged to make the switch from smoking to vaping." It has further observed that,*

*"To date, the levels of metals identified in e-cigarette aerosol do not give rise to any significant safety concerns, but metal emissions, however small, are unnecessary." On assessment of exposure to harmful constituents PHE has observed that "biomarkers of exposure assessed to date are consistent with significant reductions in harmful constituents and for a few biomarkers assessed...similar levels to smokers abstaining from smoking or nonsmokers were observed."*

**The Royal College of Physicians:** *"Toxin levels inhaled from vaping products under normal conditions are likely to be well below prescribed threshold limit for occupational exposure, which make the probability of significant long-term harm unlikely."*

**The National Academies of Sciences, Engineering and Medicine (NASEM):** *"There is conclusive evidence that completely substituting e-cigarettes for combustible tobacco cigarettes reduces users' exposure to numerous toxicant and carcinogens present in combustible tobacco cigarettes" and there is substantial evidence that completely switching from regular use of combustible tobacco products to vaping results in reduced short-term adverse health outcomes in several organs systems." As such, NASEM has concluded that "e-cigarettes pose less risk to an individual than combustible tobacco cigarettes" and "complete switching from combustible tobacco cigarettes to e-cigarettes would be expected to reduce tobacco-related health risk." Lead authors of the NASEM report on vaping, Drs. Eaton and St. Helen, also published a follow-on Evidence to Practice article, which recommended that, "if a smoker's initial treatment has failed or not been tolerated, or if the smoker refuses to use approved medications and counseling and wishes to use e-cigarettes to aid quitting, physician should encourage the smoker to switch completely to e-cigarettes. We agree with Public Health England that behavioral support should be provided to smokers who want to use e-cigarettes to help them quit smoking, and that health professionals should receive education and training in use of e-cigarettes in quit attempts."*

**The American Cancer Society** has issued a statement that stipulates basis the available scientific evidence, the use of vaping is less harmful than smoking cigarettes. It has further observed that despite clinical advice, many smokers "...will not attempt to quit smoking cigarettes and will not use FDA approved cessation medications. These individuals should be encouraged to switch to the least harmful form of tobacco product possible; switching to the exclusive use of e-cigarettes is preferable to continuing to smoke combustible products."

**The American Heart Association (AHA)** in 2014 observed in a policy statement that *“E-cigarettes either do not contain or have lower levels of several tobacco-derived harmful and potentially harmful constituents compared with cigarettes and smokeless tobacco. In comparison with NRTs, e-cigarette use has increased at an unprecedented rate, which presents an opportunity for harm reduction if smokers use them as substitutes for cigarettes.”*

In a 2016 report, the US Surgeon General called e-cigarette use among young people a “public health concern.” AHA shares that view. The AHA supports maintaining the Food and Drug Administration’s regulatory authority over e-cigarettes along with other tobacco products.

**David B. Abrams from the College of Global Public Health, New York University, writes in the April 2018 issue of Annual Review of Public Health:** *“A diverse class of alternative nicotine delivery systems (ANDS) has recently been developed that do not combust tobacco and are substantially less harmful than cigarettes. ANDS have the potential to disrupt the 120-year dominance of the cigarette and challenge the field on how the tobacco pandemic could be reversed if nicotine is decoupled from lethal inhaled smoke. ANDS may provide a means to compete with, and even replace, combusted cigarette use, saves more lives more rapidly than previously possible.”*

**Recommendations**

- ▣ To refrain from initiation of consumption of any tobacco product and related harm reduction product and quit as soon as possible.
- ▣ Transitioning to a relative harm reduction product should be considered while in the process of quitting.
- ▣ Vaping, as per NEJM report, can be considered as an alternative to faster-acting NRTs with more success than available NRTs.
- ▣ Vaping products can present an important and critical public health opportunity for existing smokers and must be used under appropriate regulations and support from medical fraternity.
- ▣ All individuals/patients should be consistently advised to quit using any form of tobacco products or related products completely.
- ▣ Caution should be exercised against the concurrent use of vaping products and combustible cigarettes.

- ▣ Based on currently available evidence, using current generation vaping products is less harmful than smoking cigarettes, but the health effects of long-term use are not known.

**Summary**

- ▣ Best option: Say no to smoking and tobacco products. Make all efforts to quit including behavioral counseling.
- ▣ If cannot them minimize harm by transitioning to safer nicotine based alternatives (faster- acting and slower-acting NRTs), approved drugs and consider vaping if all fails. Smokers, who want to use NRTs should also be evaluated for depression, anxiety.

**Policy Recommendations**

The Government of India should frame policies and regulations of vaping products that addresses:

- ▣ Marketing, Youth access, Labeling, Quality control over manufacturing and Standards for contaminants.
- ▣ Further, such regulations should allow adults to access quality-controlled products in their efforts to stop use of combustible smoking with the objective to reduce harm.
- ▣ Government of India should allocate funds for independent and continued research on the health effects of vaping products and guide their policies from time to time basis such evidence.
- ▣ With respect to vaping products, manufacturers should be disallowed from making any unproven health claims until unless the same has been approved by a relevant authority of the Ministry of Health & Family Welfare, Government of India.

**Slogans**

**For nonsmokers: Say no to smoking and tobacco products.**  
**For smokers: Quit - Quit- and Quit and till you Quit, switch to less harmful nontobacco alternatives.**



List of Conference Participants

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**SUGGESTED READING**

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### Study Shows Poor Hand Hygiene Compliance Among EMS Providers

A study published online in *Emergency Medicine Journal* found that hand hygiene compliance among emergency medical service (EMS) providers was remarkably low, with higher compliance after patient contacts compared with before patient contacts, and an over-reliance on gloves.

Use of hand rub or hand wash was observed: before patient contact, 3%; before clean/aseptic procedures, 2%; after the risk of body fluids, 8%; after patient contact, 29% and after contact with patient-related surroundings, 38%. Gloves were worn in 54% of all HH indications. Adherence to short or up done hair, short, clean nails without polish and no jewellery was 99%, 84% and 62%, respectively.

### Cabinet Approves Proposal for Promulgation of the Indian Medical Council (Amendment) Second Ordinance, 2019

The Union Cabinet chaired by Prime Minister Narendra Modi has approved two proposals: Promulgation of an Ordinance, namely “the Indian Medical Council (Amendment) Second Ordinance, 2019”; and to bring in necessary official amendments in the Indian Medical Council (Amendment) Bill, 2018 pending in Parliament for replacing the said Ordinance.

The proposal will enable the Board of Governors (BoG) appointed in supersession of Medical Council of India (MCI) as per the provisions of earlier Ordinance to continue to exercise the powers of MCI and that of Central Government under Section 10A of the Indian Medical Council (IMC) Act, 1956 so as to ensure transparency, accountability and quality in the governance of medical education in the country. It will ensure that the work already done by the BoG as per provisions of earlier Ordinance is validated and may continue... (*PIB, Cabinet, February 19, 2019*)