during laser hair removal. Thus laser therapy in conjunction with cryogen spray cooling has been the standard treatment for patients with proven clinical efficacy and safety [5].

A 22 years old female patient, otherwise healthy, presented to our burn center with frostbite injury to her both hands. The lady was replenishing the cryogen supply for spray cooling system of a long pulsed 755-nm alexandrite laser when she was injured. She poured the liquid norflurane from a pressurized dispenser into another container to recharge the cryogen for cooling device. Her hands were briefly exposed to the vapor of the cryogen (Norflurane) due to a leakage from the connector. She felt the pain and washed her hands with warm water. At the initial physical examination deep seconddegree frostbite injury with bulla formation was observed on second and third fingers of the left hand (Fig. 1). Superficial second degree and first-degree frostbite injuries were also present on her both hands. To the best of our knowledge there is only one reported case of 1,1,1,2-tetrafluoroethane frostbite injury in the English literature. However in that case orofacial and digital frostbite was observed following the intentional inhalation of a commercial air-dusting agent. The patient suffered from frostbite due to 1,1,1,2-tetrafluoroethane propellant component of the abused agent [7]. Norflurane as a cryogen is becoming widely used in laser treatments. The electronically controlled cryogen spray cooling systems provide a high safety for patients. However incautious service providers or medical professionals are more vulnerable against this chemical hazard, particularly in course of the device maintenance. Professionals should be continuously educated to beware of handling the norflurane with precaution and appropriate garments.

Conflict of interest statement

The authors do not have any conflict of interest or commercial associations or financial interests to disclose.

REFERENCES

- Stefanutti G, Yee J, Sparnon AL. Cryogenic burns from intentional use of aerosol spray in children: an emerging phenomenon. Burns 2010;36:e65-7.
- [2] Sever C, Ulkur E, Uygur F, Celikoz B. Hand burn caused by Freon gas. Burns 2008;34:1210–2.
- [3] Nahm WK, Tsoukas MM, Falanga V, Carson PA, Sami N, Touma DJ. Preliminary study of fine changes in the duration of dynamic cooling during 755-nm laser hair removal on pain and epidermal damage in patients with skin types III–V. Lasers Surg Med 2002;31:247–51.
- [4] Eremia S, Li C, Newman N. Laser hair removal with alexandrite versus diode laser using four treatment sessions: 1-year results. Dermatol Surg 2001;27:925–9.
- [5] Majaron B, Kimel S, Verkruysse W, Aguilar G, Pope K, Svaasand LO, et al. Cryogen spray cooling in laser dermatology: effects of ambient humidity and frost formation. Lasers Surg Med 2001;28: 469–76.
- [6] http://pubchem.ncbi.nlm.nih.gov/compound/ 1_1_1_2-tetrafluoroethane [accessed 03.31.15].

[7] Koehler MM, Henninger CA. Orofacial and digital frostbite caused by inhalant abuse. Cutis 2014;93:256–60.

Sinan Öksüz^{*} Fikret Eren Bilge Kağan Aysal Gulane Military Medical Academy, Haydarpasa Training Hospital, Department of Plastic Reconstructive Surgery and Burn Unit, Istanbul, Turkey

*Corresponding author at: Gulhane Askeri Tip Akademisi, Haydarpasa Egitim Hastanesi, Plastik Rekonstruktif ve Estetik Cerrahi Servisi, Tibbiye Cad. 34668 Uskudar, Istanbul, Turkey. Tel.: +90 533 322 90 12; fax: +90 216 348 78 80 E-mail address: sinanoksuz@gmail.com (S. Öksüz)

 $http://dx.doi.org/10.1016/j.burns.2015.05.027\\ 0305-4179/© 2015 Elsevier Ltd and ISBI. All rights reserved.$

Letter to the Editor

Do Iranians need more legislation against acid attackers?



Dear Editor,

Lama et al. presented a comprehensive assessment of intentional burn admissions in Bir Hospital and well described socio-demographic and psychosocial characteristics of their patients [1]. Hereby, we intend to point to a new social event in our country and confirm the authors' concerns about health and gender issues.

Recently, the Iranian Vice President announced that a new bill, against acid attackers, had been submitted to the parliament to be passed [2]. The government's decision was made due to a series of similar acid throwing to the face of some innocent women within a few days when they were unconsciously assaulted in Isfahan, one of the main cities of Iran. Although Iranian president, judiciary chief and some other Iranian authorities condemned the act seriously, the perpetrators and their motivations have not been found yet.

The women who were attacked by acid are called the main victims in Iran, in Rasouli et al.'s article [3]. Also, Farhad et al., in an Iranian study, showed that half of the perpetrators were their husbands or relatives and the remainders were strangers [4]. Both of the Iranian researchers associated the marital issues, poverty, and larceny with acid attacks. However, it seems that another social determinant of health (SDH), called gender equity, should be more considered. WHO brought forward the gender equity as one of the most important SDH protecting violence against women. It recommended five applied protocol to all governments to decrease gender inequity [5].

There are various penalties for acid attackers in current Iranian legislation including fine, imprisonment and revenge. For instance, one of the eyes of a culprit has been recently gotten blind due to the "eye to eye act" for his criminal acid throwing [6].

Hence, we believe that implementing WHO's guidelines to promote gender equity is more helpful for Iranians rather than legislations against acid attackers.

Authors' contributions

- 1. Dr. Payman Salamati designed the idea, drafted the paper and approved the version to be published.
- Dr. Zohrehsadat Naji designed the idea, revised the paper critically and approved the version to be published.

Conflict of interest

None.

Role of the funding source

None.

Ethics committee approval

The paper has been prepared in accordance with the rules of the ethical review board of Tehran University of Medical Sciences.

REFERENCES

- [1] Lama BB, Duke JM, Sharma NP, Thapa B, Dahal P, Bariya ND, et al. Intentional burns in Nepal: a comparative study. Burns 2015. http://dx.doi.org/10.1016/j.burns.2015.01.006.
- [2] Veep calls for allocating funds for acid attack victims. http:// www.irna.ir/en/News/2772542 [accessed 18.06.15].
- [3] Rasouli HR, Ebrahimi A, Kalantar Motamedi MH.
 Raising awareness against acid attacks. Lancet 2015;385:
- [4] Farhad H, Naghibzadeh B, Nouhi AH, Rad HE. Acid burn violence in Iran. Ann Burns Fire Disasters 2011; 24:138–40.
- [5] Marmot M, Friel S, Bell R, Houweling TA, Taylor S. Commission on Social Determinants of Health. Closing the gap in a generation: health equity through action on the social determinants of health. Lancet 2008;372: 1661–9.
- [6] Eye for an eye: Iran blinds acid attacker. http://www. theguardian.com/world/2015/mar/05/eye-for-an-eye-iranblinds-man-who-carried-out-acid-attack [accessed 18.06.15].

Payman Salamati Sina Trauma and Surgery Research Center, Tehran University of Medical Sciences, Tehran, Iran

Zohrehsadat Naji Iranian Association for Philosophy of Religion, Tehran, Iran *Corresponding author at: No. 4, 64th Street,
Kurdestan Express, Tehran, Iran.
Tel.: +98 21 88046891; fax: +98 21 88046891
E-mail address: zohrehsadat.naji@gmail.com (Z. Naji)
psalamati@tums.ac.ir (P. Salamati)

http://dx.doi.org/10.1016/j.burns.2015.06.0240305-4179/© 2015 Elsevier Ltd and ISBI. All rights reserved.

Response to Letter to the Editor

Acid and burns violence against women: The role of the courts



Dear Editor,

In response to the Letter by Salamati and Naji (2015) "Do Iranians need more legislation against acid attackers?" we would like to make some comments on the broader international context.

Acts of acid attack and burns violence against women are serious examples of gender-based violence and occur in countries where gender inequality remains a significant social problem, including Iran [1] and Nepal [2]. As a public health concern, these intentional injuries require interventions to prevent future injuries and deaths, and to manage the problems which survivors face. A question that arises is: What is the role of the courts?

The court process serves multiple roles in managing the outcomes of, and preventing, criminal behaviour. Courts impose a sentence to ensure the offender is adequately punished for the offence and to protect the community. Sentencing also acts as a public deterrent and projects to the community what kinds of behaviours are not permissible in the eyes of the law. However, the current situations in Iran (Letter to the Editor in this issue [3]) and Nepal reflect different limitations in the courts' ability to achieve just outcomes for victims of gender-based violence and appropriate punishment for perpetrators. These examples demonstrate that in certain countries litigation may not be sufficient, or alternatively, may create other problems.

In Nepal, laws and policies exist to promote and protect the rights of girls and women in cases of gender-based violence. However, there are significant barriers to protecting women from violence and ensuring they have a right to justice and support when needed. These include, access to the justice system (police response), gaps in the law (e.g. acid and burns violence not explicitly criminalized, inadequate punishments), access to legal aid and victim protection, and laws not being properly or consistently enforced [4,5]. Similarly, in India, in the wake of the brutal rape in 2012 of a student in New Delhi, there is intense public pressure to enforce existing laws and for legal reform in the area of gender-based violence.

By contrast, under Iran's Islamic penal code, offenders found guilty of acid attacks face the possibility of corporal punishment by blinding [6] with a proposed new bill strengthening this hardline approach [7]. This kind of punishment is condemned by