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**A Matter of Life and Death? Regulating to Avert the Risks of Cancer from Cosmetic
Sunbed Use in the UK and Australia.**

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ABSTRACT

Sunbed use can be seen as part of a beauty regime, a means of ensuring a bronzed desirable appearance. However there is an increasingly sinister side to the tanning phenomena. Tanning in the latter part of the 20th Century and early years of the 21st Century is no longer simply a question of beauty and desirability. Tanned skin may lead to skin cancer. This paper focuses on the dangers posed by sunbed use to obtain an artificial tan. First it explores the risks of sunbed tanning, how it can be viewed as a question for public health and the prospects for regulation. Secondly, it explores the current scope of legal regulation of sunbed use in the UK and how existing regulation has proved problematic. Thirdly, using Australia as an example it examines the case for prohibition of commercial tanning operations. Finally it concludes by arguing that the time has come to move towards prohibition of commercial sunbed use in the UK.

A Matter of Life and Death? Regulating to Avert the Risks of Cancer from Cosmetic Sunbed¹ Use in the UK and Australia.

1. The Rise of Tanning as a Beauty Concern

In the Twentieth Century, from the time of Coco Chanel onwards, the tanned or bronzed body came to be seen as something aspirational.² It spoke of foreign holidays and the lifestyle of the rich and famous from the 1920s on. It was a matter of “looking good” and “looking well”. The popularity of a tanned appearance has been compounded in the Twenty-First Century by an increasing emphasis on the importance of appearance and body image, exacerbated by the growth of social media, often via the “Selfie” self-portrait photograph using a mobile phone camera or computer webcam. The skin that is revealed is seen to be more attractive and enhanced in appearance by a tan.³ This culture of tanning is a global phenomenon in the sense that a significant number of non-Hispanic white people across the developed world, who would normally have a fair-skinned appearance, currently attempt to look tanned as often as they can. This phenomenon has been fuelled by the rise in cheap flights and package holidays. To maintain this tanned appearance people use artificial means such as a sunbed (solarium),

¹ In this article we follow the lead of the World Health Organisation and use the term ‘sunbed’ to refer to the method by which ultra violet radiation (UVR) is emitted by glass tubes or lamps, and is used cosmetically as an artificial means of promoting melanoma production and a tanned appearance. (World Health Organisation, Artificial tanning devices: public health interventions to manage sunbeds (Geneva, 2017), Other terms have been used to refer to this method such as sunlamp, stand up tanning booth, or solarium/solaria.

² J.M. Mann, ‘Changes in Skin tanning attitudes: Fashion articles and advertisements in the early Twentieth Century’, *American Journal of Public Health* 99, (2004): 21-40.

³ A. K. Day, et al., ‘Australian young adults’ tanning behaviour: The role of ideal skin tone and sociocultural norms’, *Australian Journal of Psychology*, version online, (2016): 1-9.

sunlamp or tanning booth (indoor tanning).⁴ In 2008 approximately 25% of adults in the UK were found to have used a sunbed, and approximately 6% of young people aged 11-17, with a much higher percentage of up to 11% in relation to those resident in cities.⁵ The desire for a tan has also been accompanied by the use of fake tan lotion applied topically to the skin, bronzer make-up on the face and body, and all-over body spray tan administered by a beautician in booths in salons or in private homes (sunless tanning).⁶

However there is an increasingly sinister side to the tanning phenomenon. The association between sun exposure and skin cancer has been known for many years however it was the growth of the package holiday which was particularly linked to the increase in the incidence of skin cancer.⁷ But tanning through sun damage is not the only cause of skin cancer, as there are serious risks to health through the use of artificial tanning on a sunbed, as explored below. As a result, the sunbed industry we examine in this article is not simply something which is the concern of the private arena or merely a question of choice about appearance. Instead we argue that this is a matter of public health, and as such, has major implications for how we should approach questions of choice and of regulation in this area. Here, 'regulation' is used as a term to encompass regulation through primary and secondary legislation and 'soft' law in the form of guidance and codes of practice.

⁴ B. Friedman, C. Joseph, & L.K. Ferris, 'Indoor tanning, skin cancer and the young female patient: A review of the literature', *Journal of Pediatric and Adolescent Gynaecology* 28 (4) (2015): 275–283.

⁵ Department of Health, *Cancer Reform Strategy: Maintaining momentum, building for the future – first annual report* (London, 2008).

⁶ J.M. Dugdale, 'A Plea for Consumer Protection: The Potential Human Health Hazards of the Spray Tanning Epidemic', *Indiana Health Law Review* 11 (2014): 347-398.

⁷ J. Melia & A. Bulman, 'Sunburn and tanning in a British population' *Journal of Public Health Medicine* 17 (1995): 223-229; M.A. Stott, 'Tanning and sunburn: knowledge, attitudes and behaviour of people in Great Britain', *Journal of Public Health Medicine* 21(4) (1999): 377-384.

This article focuses on the dangers posed by sunbed use to obtain an artificial tan. First, it explores the risks of sunbed tanning, how it can be viewed as a question for public health and the prospects for regulation. Second, it explores the current scope of legal regulation of sunbed use in the UK and how implementation of regulation has proved problematic. Third, using Australia as an example, it examines the case for prohibition of commercial tanning operations. Finally, it concludes by setting out the lessons to be learned in the UK, and the future challenges for policy makers and legislators, in this area.

2. Public Health, Cancer, Ethics and Sunbed Regulation

The rise of skin cancer has become a major public health concern. Statistically the prevalence of melanoma (skin cancer) is highest among non-Hispanic whites in developed countries in the Northern Hemisphere (USA, Europe, and Russia) and Southern Hemisphere (Australia and New Zealand).⁸ Melanoma is directly associated not only with exposure to the sun, but also to the use of sunbeds, particularly amongst young women.⁹ A clear relationship has been established between indoor tanning, melanoma risk and other negative health consequences.¹⁰ Recent meta-analyses also support a strong association between cutaneous malignancy and indoor tanning.¹¹ In 2006 the World Health Organization's (WHO) International Agency for Research on Cancer (IARC) published the first report by experts on sunbed use and its association with skin cancer or melanoma.¹² Its meta-analysis of 19 studies of associations between the use of sunbeds and the risk of melanoma showed an increase of 15% in the risk of

⁸ B. K. Armstrong, & A. Kricker, 'The epidemiology of UV induced skin cancer', *Journal of Photochemistry and Photobiology B: Biology* 63 (1), (2001): 8-18.

⁹ Friedman/ Joseph, Ferris, 275–283 (n. 4).

¹⁰ M. Z., Le Clair, & M. G. Cockburn, 'Tanning bed use and melanoma: Establishing risk and improving prevention interventions', *Preventive Medicine Reports*, 3, (2016): 139–144.

¹¹ Friedman, / Joseph, /Ferris, 275–283(n. 4).

¹² World Health Organisation, 'Exposure to Artificial UV Radiation and Skin Cancer' www.iarc.fr/en/publications/pdfs-online/wrk/wrk1/ArtificialUVRad&SkinCancer.pdf. (2006).

melanoma amongst those who had used a sunbed compared to those who had not. Following this, in 2009, the IARC added UV-emitting tanning devices to its list of group 1 carcinogens ('carcinogenic to humans'), with evidence that there was a 75% increase in cutaneous melanoma when the use of tanning devices starts before the age of 30. The IARC also found significant evidence of an increased risk of ocular melanoma associated with the use of tanning devices such as sunbeds.¹³ Skin cancer is also regarded as a public health concern by the UK's National Institute for Health and Clinical Excellence.¹⁴ Frequent indoor tanners may receive 1.2 to 4.7 times the yearly dose of UVA they receive from sunlight in addition to doses received by sun exposure.¹⁵

A further implication of sunbed use is the a significant risk of an effect on consumers' psychological health resulting in addictive behaviour as a result of the endorphins released by the body after being exposed to the UVA and UVB emissions of a sunbed. Indeed there is evidence that approximately 5% to 10% of indoor tanners have met criteria for tanning dependence, similar to prevalence rates for substance dependence.¹⁶ Such addictive behaviour is likely to decrease the likelihood that this group of people will heed warnings about the risks of sunbed use. Particular concerns have been expressed as to the risks of tanning for minors. The Committee on Medical Aspects of Radiation in the Environment (an independent advisory committee which provides expert evidence to the UK Government) proposed in its 2009 Report, "The Health Effects and Risks Arising From Exposure to Ultraviolet Radiation from

¹³ Friedman, Joseph, and Ferris, (n. 4).

¹⁴ National Institute for Health and Clinical Excellence, Skin Cancer Guideline, (London, 2006).

¹⁵ M. K. Tripp, et al., 'State of the science on prevention and screening to reduce melanoma incidence and mortality: The time is now', *CA: a cancer journal for clinicians*, 66(6), (2016): 460-480.

¹⁶ See further the discussion in Tripp et al. (n 15).

Artificial Tanning Devices” a ban on commercial sunbed use by persons under 18.¹⁷ Concerns over sunbed use have continued to increase over the last decade. In 2016 there was a review of the evidence by the EU Scientific Committee on Health, Environment and Emerging Risks (SCHEER). This body went one step further and concluded the strong evidence of skin cancer following sunbed exposure meant that there was no safe limit of exposure to sunbed UV radiation.¹⁸

Given sunbed use can be seen as a real public health risk, on what basis should legislators and policy makers address the question of the safeguarding of sunbed users’ health? Is the apparent risk to health from sunbed use a justification for state intervention and regulation of the use and commercial operation of sunbeds? Here we can usefully consider this in the context of arguments concerning public health ethics.¹⁹ State regulation here may be seen as ethically problematic by some, as it can be seen as an unjustifiable limitation upon individual decision making autonomy. Indeed it could be argued that this may infringe individual human rights. However the World Health Organisation in their 2017 report “Artificial Tanning Devices: Public Health Interventions to Manage Sunbeds” have commented that

“While the protection and respect for individual consumer choice is important, human rights law around the right to health places a responsibility on the state to ensure that consumers are adequately informed and that protections exist to safeguard against over-exposure to health risks such as those involved in sunbed use. This is particularly relevant with regards to children, as described in the UN Convention on the Rights of the Child.²⁰”

¹⁷Committee on Medical Aspects of Radiation in the Environment (COMARE): Thirteenth Report, *The Health Effects and Risks Arising From Exposure to Ultraviolet Radiation from Artificial Tanning Devices*, (London, 2009).

¹⁸ Scientific Committee on Health, Environmental and Emerging Risks (SCHEER) *Opinion on Biological effects of ultraviolet radiation relevant to health with particular reference to sunbeds for cosmetic purposes*, (1 November 2017), para. 1.8.

¹⁹ J. Coggon, *What Makes Health Public? A Critical Evaluation of Moral, Legal and Political Claims in Public Health* (Cambridge: Cambridge University Press, 2012).

²⁰ N, 1 World Health Organisation p. 31.

Libertarian arguments can arguably be justifiably countered where needed to prevent harm.²¹ In his famous book ‘On Liberty’ the philosopher John Stuart Mill memorably stated his utilitarian ‘harm principle’ whereby, ‘The only purpose for which power can be rightfully exercised over another member of a civilised community against his will is to prevent harm to others’.²² The nature and scope of the application of Mill’s harm principle has been the source of considerable debate in relation to legal regulation in general²³ and in the public health context in particular.²⁴

In the context of public health the Nuffield Council on Bioethics (NCOB) in its Report on Public Health Ethics uses such utilitarian analysis along with the idea of stewardship.²⁵ The Report thus argues that it is acceptable to restrict autonomy on certain ethical grounds including that of preventing harm to others,

‘even in an approach that seeks to ensure the greatest possible degree of state interference there is a core principle according to which coercing, liberty-infringing state intervention is acceptable; where the purpose is to prevent harm to others.’²⁶

Of course, as the NCOB comment, the classical Mill analysis is limited to some extent in that it excludes children/vulnerable persons where interventions can be made to prevent them damaging their own health. In addition, liberty is founded upon concerns to maximise utility whose public health dimension includes steps necessary for society’s interests. This can, for

²¹ See also D.B Anderson, and S.F. Midtgaard, ‘Stay Out of the Sunbed’, *Public Health Ethics* (2016): 1-3.

²² J.S. Mill (1859) On Liberty, in S., Collini, *On Liberty and Other Essays* (Cambridge: Cambridge University Press, 1989).

²³ J. Feinberg, *Harm to Others*, (Oxford: Oxford University Press, 1984).

²⁴ L.O. Gostin & K.G. Gostin, ‘A broader liberty: JS Mill, paternalism and the public health’, *Public Health* 123(3) (2009): 214-21.

²⁵ Nuffield Council on Bioethics *Public Health: Ethical Issues*, (London: Nuffield Council on Bioethics, 2007).

²⁶ Ibid. para. 2.14.

example, encompass clean water, or controls on working hours. The NCOB suggest that Mill, though in opposition to coercion, would be likely to be in support of programmes which ‘advise, instruct and persuade’.²⁷ The NCOB themselves however go beyond this. They suggest that a framework for public health should on ethical grounds incorporate what is more akin to social contract theory and ideas of ‘community’, which they see as being ‘the value of belonging to a society in which each person’s welfare and that of the whole community matters to everyone’.²⁸ The Report thus ultimately proposes a revised liberal framework, which includes social contract theory and harm prevention - a stewardship model - with an obligation on the state to provide conditions which enable people to be healthy.²⁹

The Report goes on to suggest five ethical factors that should be taken into consideration by policy makers in the arena of public health, in order to ensure regulation protects the community, prevents harm, and provides conditions for good health. The first ethical factor concerns the need for evidence-based work to ensure regulation is necessary. Certainly this is critically important in relation to the regulation of tanning. For example, while the tanning industry promotes the idea of sunbeds as facilitating health through increasing Vitamin D intake, this is disputed by clinicians who argue that any Vitamin D gains are more than off-set by the risks of tanning itself. The second ethical factor relates to the need to identify the extent and nature of any risk involved. As we have already seen, tanning is seen as a major risk factor for skin and other cancers and health problems, and the nature of this risk may thus justify interventionist action by the State.³⁰

²⁷ Ibid. para. 2.20.

²⁸ Ibid. para. 2.34.

²⁹ Ibid. paras. 2.21-2.24.

³⁰ B, Friedman, C. Joseph, & L. K. Ferris, (n 4) D. B Anderson, & S.F. Midtgaard, (n. 21)

The third ethical factor highlighted in the NCOB's Report is the importance of the 'precautionary principle' and proportionality. The precautionary principle has been developed as a descriptive term referring to a perceived need to prevent risk through regulation, in for example regulation on health and safety. It has also been used in debates regarding the development of regulation on new technologies; in the context of public health; and has been utilised extensively in the development of EU law.³¹ While a precautionary approach can support public health regulation, such approaches should ideally also be proportionate, so that regulation that protects the community is not too narrow in scope, nor too harsh in sanction. Thus, in relation to the regulation of tanning premises, the factors that contribute to an effective and proportionate approach need to be considered. Should regulation here be, for example, a matter of education, licensing or prohibition? The fourth ethical factor that needs to be considered by policy makers according to the NCOB is the extent to which individuals are truly able to make autonomous decisions about their health. In relation to many decisions, individuals will inevitably be subject to external influences. The extent to which this will render individual choice constrained or illusory is something which is disputed,³² and can be seen as context dependent but could be used as a persuasive argument for more restrictive regulation.³³ The fifth and final ethical factor refers to vulnerable groups in societies, the inequalities between different groups, and the need for regulation to be appropriate and beneficial for such groups. Particularly relevant here are those concerns in relation to the impact of sunbed use on young persons below the age of legal majority, and we explore these below.

³¹ European Commission, Communication from the Commission on the Precautionary Principle (COM, 2000).

³² N. Manson, & O. O'Neill, *Rethinking Informed Consent in Bioethics* (Cambridge: Cambridge University Press, 2007).

³³ D. Beylerveld, & R. Brownsword, *Consent in the Law* (Oxford: Hart, 2007).

The NCOB stresses the importance of stewardship and the communitarian aims of protecting the community, preventing harm, and enabling good health. It therefore advocates regulation on public health that encompasses five ethical factors: producing evidence based work; identifying risk levels; regulating proportionally as a precaution; enabling choice and autonomy; and regulating in an appropriate and beneficial way. We argue here that following this ethical model, it would seem appropriate to intervene to regulate sunbed use as a precautionary measure to avert its evident risks to public health, to enable real choice and autonomy, in a beneficial way that is also appropriate and proportionate.

In order to achieve their ethical aims the NCOB consider different regulatory approaches. They do this by way of an ‘Intervention Ladder’, which has ‘progressive steps from individual freedom and responsibility towards state intervention as one moves up the ladder’.³⁴ These steps are referred to in the NCOB Report as eight ‘rungs’. These regulatory steps or rungs range from simply not acting at all, through provision of information, incentives, disincentives, to the restriction, or ultimately the elimination, of behaviour. Which approaches are thus most appropriate in relation to the regulation of sunbed use?

The first rung in the Intervention Ladder is to do nothing or to simply monitor the current situation. It is suggested that given the risks of attendant harms and the inadequacy of current regulatory approaches this is not an appropriate option. The second rung is the least restrictive in terms of regulation. The intervention here is that of informing and educating the public

³⁴ Nuffield Council on Bioethics, (n 24) paras. 3.37- 3.38.

through the provision of information. It is very important to inform users of sunbeds of the consequent risks of serious harm from sunbed use and this combined with education could indeed potentially change behaviour. As we shall see below this is a strategy utilised already in the UK, albeit with somewhat inconsistent implementation. The third rung is that of ‘enabling choice’ or facilitating people to change their own behaviour. There is already some evidence of this in the area of tanning from sunbed use, as Cancer Research UK has campaigned very strongly both for regulation in this area, and for facilitation of choice through more pro-active steps by public health campaigners.³⁵ The fourth rung is that of facilitating choice by means of a default option, such as suggesting healthier alternatives. At first glance this might be seen as being applicable in relation to promoting the use of artificial tanning as an alternative option to sunbed use, however, it should be noted that artificial spray tanning has been the subject of recent controversy and it has been suggested that it could itself cause considerable damage to health, as noted above.³⁶ The fifth rung refers to the notion of guiding choice through the use of incentives including financial incentives. Incentives to change behaviour have not been used to date in the context of sunbed use in the UK. It remains uncertain as to whether utilising such incentives in relation to sunbed use would make a major difference.

The sixth rung involves the idea of guiding choice through the use of disincentives. Disincentives could be used here through targeting sunbed operators and making it more difficult for them to operate, or through controlling and constraining the use of sunbeds in tanning salons. There is now a degree of regulation of sunbed premises and obligations are placed on sunbed operators across the UK. However in practice such regulation has not

³⁵ <http://www.cancerresearchuk.org/support-us/campaign-for-us/our-campaigning-successes/sunbeds>.

³⁶ Dugdale, (n. 6).

translated into effective enforcement as we shall see below, and there is currently no comprehensive licensing structure nor any real disincentives placed upon users of tanning salons.

Perhaps of most interest to us in the context of sunbed use are the final two rungs of the Intervention Ladder – the seventh and eighth. The seventh rung is the category the Report refers to as restricting choice.³⁷ This can be achieved through prohibition of sunbed premises or by eliminating choice in relation to certain groups. As explored below, it is the latter strategy which has been partly utilised in the UK with, to date, rather limited success. There is an eighth and final rung in the Nuffield ladder: that of eliminating choice altogether, which in the context of sunbed use would be to ban the use of sunbeds themselves. This has not been attempted as a strategy in the UK, however it has been adopted in Australia and we discuss below whether in the UK we should move towards this approach.

As described by the NCOB Report, various levels of public health safeguards can be offered by regulation, at least in principle. However, the effectiveness of regulation in this area, as in any other, will also depend to a large degree on its successful implementation. How law, policy, regulation or Statute, is implemented, how it works in practice, and who has been involved directly in its implementation, can determine its impact and whether it can successfully meet its aims, whether these be preventative or facilitating. Brownsword and Goodwin³⁸ in their examination of the regulatory effectiveness of a myriad of policies and laws, from the patenting of human embryonic stem cells to cyberspace, highlight the various problems can prevent the successful implementation of regulation.

³⁷ Nuffield Council on Bioethics, (n. 24) para. 3.37.

³⁸ R., Brownsword, & M. Goodwin, *Law and the Technologies of the Twenty-first Century* (Cambridge: Cambridge University Press, 2012), pp. 271-368.

One problem, for example, can be that the State commits inadequate resources for inspection and correction. Such resources are necessary for the effective and consistent enforcement of any law. If the aim of the law is to prevent or reduce a recognized risk to patients or consumers, then inspection is a necessary part of that law, and it needs to be fully resourced. Under-resourced audit might lead to fewer and infrequent inspections, which would limit the ability of inspectors to determine whether, for example, a commercial operator of sunbeds was behaving unlawfully by using equipment that was prohibited. Another important issue highlighted by Brownsword and Goodwin is that of resistance by regulatees.³⁹ This could be on economic, social or cultural grounds. Those regulatees who would be expected to change their behaviour, might be resistant to that change, and this can stall the successful implementation of regulation. Regulatee resistance might mean that the behaviour of those who use commercial sunbeds thwarts their prohibition. Commercial operators may ignore guidelines for equipment use or age limits of consumers on economic grounds. Consumers might ignore health risks by attempting to find illegal operators, or lie about their age, on social and cultural grounds in their quest for tanned skin, whether they are fully informed of the health risks or not. As we shall see in the next section, such practical regulatory challenges have been experienced in the UK in relation to the regulation of tanning.

3. Current Legal Regulation of Sunbed Use in the UK

³⁹ Ibid pp. 271-2.

The identified public health risk of commercial sunbed use has led to legal regulation in the UK. As we shall see below the main concerns which have arisen in relation to legal regulation pertain to: the use of sunbeds by children and unstaffed tanning booths; provision of information; sunbed emissions; protective eyewear; and local authority enforcement.

Across the UK there are clear tensions between the need for effective and comprehensive national oversight, and the practicalities of managing such regulation at local level. The first part of the UK which moved to regulate sunbed use was Scotland. Here there were concerns over the reported incidence of non-melanoma skin cancers which had trebled over a ten year period and of melanoma skin cancers which had more than doubled. While this was not only due to sunbed use, it played a considerable part. In May 2006 the Regulation of Sunbed Parlours Bill was introduced into the Scottish Parliament by Kenneth MacDonald MSP. This was followed by the Public Health (Scotland) Act 2008 and the Public Health (Scotland) Act 2008 (Sunbed) Regulations 2009.⁴⁰ Following active campaigning in the rest of the UK Julie Morgan MP introduced a private members bill, which received government support.⁴¹ Legislation was subsequently passed in England and Wales in the form of the Sunbeds Regulation Act 2010. This was followed in Northern Ireland by the Sunbeds Act (Northern Ireland) 2011. All these pieces of legislation broadly follow the approach of the Scottish legislation. They are a mixture of primary legislative provisions with accompanying secondary legislation. However while regulations were produced in 2011 by the Welsh Government to implement the 2010 Act,⁴² and in 2012 in Northern Ireland following the 2011 Act,⁴³ the

⁴⁰ SI (2009) No 388.

⁴¹ Speech by the Right Hon Andy Burnham, Secretary of State for Health at the All Parliamentary Group on Cancer, 1st December 2009.

⁴² The Sunbeds (Regulation) Act 2010 (Wales) Regulations 2011, SI No. 1130 (W.156).

⁴³ The Sunbeds (Information) Regulations (Northern Ireland) 2012 SI 91.

English Government has not, to date, issued implementing regulations. While there has been some provision in England at local authority level to require licensing of salons, for example in London under the Local Authorities Act 1991, and in Birmingham under the Birmingham City Council Act 1990, as we shall see below the lack of implementation of the Sunbed legislation in England has led to considerable problems.⁴⁴

Here we outline the key features of the current law across the various devolved jurisdictions and consider them in the light of the Report of the All Party Parliamentary Group on Skin published in 2014.⁴⁵ First, following the particular concerns regarding use of sunbeds by children, legislation across the UK places limitations on their use by persons under 18. Initially in 2008 in Scotland,⁴⁶ and then subsequently in 2010 in England and Wales,⁴⁷ and in 2011 in Northern Ireland,⁴⁸ statutory obligations were placed on those operating sunbed businesses to secure that persons under 18 do not use their sunbeds and that they do not make offers to make sunbeds available to persons under 18. Criminal penalties are imposed on those who fail to comply.⁴⁹ In Wales, Northern Ireland and Scotland, regulations and legislation also make it an offence to sell or hire sunbeds to persons under 18⁵⁰. In addition in all three jurisdictions provision is made for obtaining official identification as to age such as through being shown an ID card with a Proof of Age standards scheme hologram.⁵¹ It should be noted that in all four jurisdictions exceptions exist for the therapeutic use of sunbeds for those with skin disorders and at medical discretion.⁵²

⁴⁴ House of Commons Research Paper No 10/07 Sunbeds (Regulation) Bill 19 of 2009-10 17th January (2010).

⁴⁵ All Party Parliamentary Group on Skin (2014) Inquiry into Sunbed Regulation in the UK <http://www.skin-camouflage.net/SunbedInquiryReport2014.pdf>.

⁴⁶ Public Health (Scotland) Act 2008 s.95.

⁴⁷ Section 2(1) of the Sunbeds Regulation Act 2010.

⁴⁸ Sunbeds Act (Northern Ireland) 2011, ss. 1 and 2.

⁴⁹ Sunbeds Regulation Act 2010, s.2 (6), Sunbeds (Northern Ireland) Act 2011, s.1.

⁵⁰ Public Health Act (Scotland) s. 96 Public Health etc; (Scotland) Act 2008 (Sunbed) Amendment Regulations 2013 Regulation 3(2).

⁵¹ The Public Health etc. (Scotland) Act 2008 (Sunbed) Amendment Regulations 2013, para 2.

⁵² S.3 Sunbeds Regulation Act 2010 in relation to England and Wales, S. 10 Northern Ireland and s.99 Public Health (Scotland) Act 1998).

Despite the fact that there is legislation in place in the UK, though with more limited provisions in England due to the lack of regulations enforcing several provisions of the primary legislation, its effectiveness has been questioned. In 2014 the All Party Parliamentary Group on Skin (APPG) published their ‘Inquiry Into Sunbed Regulation in the UK’ Report.⁵³ The Report first stressed the need for full implementation of the law in England.⁵⁴ In addition evidence to the APPG noted poor compliance with the law in relation to use of sunbeds by those under 18.⁵⁵ Evidence from Public Health England to the APPG also reported worrying effects of sunbed use by minors including that

‘half of all children who had ever used a sunbed (52.8%) reported signs or symptoms of burning. 100% of those who most frequently used coin/token operated salons reported burning, and 36% of those who used sunbeds in the home reported burning. (...) Over half (53.7%) of children who used a sunbed were never asked to show ID to prove their age and four out of ten were never given information on skin type (40.0%) or on potential harm.’⁵⁶

Press reports of incidents prior to the Report being published illustrate what can go wrong without effective enforcement of the law. In 2013 there was a successful prosecution of an owner of a gym in Bury Manchester under the Sunbed Regulation Act 2010 which allowed a 15 year old to use a sunbed for 10 minutes on two successive days. She had never been on a sunbed before. She suffered severe burns, was kept in hospital on a drip for 24 hours and missed school for 3 weeks suffering with agonising blisters to her chest, legs, back and face.⁵⁷ The APPG recommended that the Department of Health looked at this as a matter of urgency

⁵³ All Party Parliamentary Group on Skin (n.45).

⁵⁴ All Party Parliamentary Group on Skin, (n.45), p. 5.

⁵⁵ Ibid. p. 9.

⁵⁶ Public Health England written response to the All Party Parliamentary Group.

⁵⁷ Daily Mail (2013) “Gym owner fined after girl, 15, suffered agonising burns all over her body following two illegal sunbed sessions just ten minutes long”<http://www.dailymail.co.uk/health/article-2270025/Schoolgirl-15-left-agonny-severe-burns-body-allowed-use-sunbed-gym.html>

into extending the ban on unstaffed tanning booths to England,⁵⁸ but to date this has not been done.

Secondly, further specific provisions concern the use of sunbeds by those over 18. Regulations in Scotland,⁵⁹ Wales and Northern Ireland address the remote sale/hire of sunbeds and supervision of use.⁶⁰ Where sunbeds are used in salons by adults provisions in Scotland, Wales and Northern Ireland also state that these are not to be left unsupervised.⁶¹

Thirdly, primary legislation and regulations across all four jurisdictions in the UK address the provision of information to sunbed users. These place duties on owners of sunbed premises to provide users with information concerning the effects on their health of sunbed use and to display it to people where it is readily visible.⁶² The legislation states that notices should include statements such as risks to health including significantly higher risk of skin cancer and eye damage and accelerated skin ageing. Furthermore they must state that health risks outweigh any potential benefits in using sunbeds to supplement Vitamin D. In addition supervisors in salons in Wales and Northern Ireland are required to provide protective eyewear⁶³. Again while in England the primary legislation requires regulations to make provision in relation to information such regulations have, to date, not been enacted⁶⁴. However even where such regulations exist their effectiveness has as with other aspects of the regulations highlighted above been questioned. The APPG noted evidence from Cancer UK

⁵⁸ All Party Parliamentary Group on Skin, (n.45) p. 5.

⁵⁹ Public Health etc (Scotland) Act 2008, s. 97.

⁶⁰ The Sunbeds (Regulation) Act 2010 (Wales) Regulations 2011, No 1130.

⁶¹ Sunbeds (Northern Ireland) Act 2011, s3. Sunbeds (Regulation) Act 2010 (Wales) Regulations 2011, No 1130, para 4. Public Health (Scotland) Act 2008, s.98.

⁶² The Public Health etc. (Scotland) Act 2008 (Sunbed) Regulations 2009, SI No 388, para 3; The Sunbeds (Regulation) Act 2010 (Wales) Regulations 2011, SI No. 1130 (W.156), para 7; The Sunbeds (Information) Regulations (Northern Ireland) 2012 SI 91, para 6.

⁶³ Sunbeds (Northern Ireland) Act 2011, s.7, The Sunbeds (Regulation) Act 2010 (Wales) Regulations 2011, No 1130, s.8

⁶⁴ Sunbeds Regulation Act 2010, s.5.

that four out of ten of every sunbed users had not been given information as to risks of potential harm.⁶⁵ In addition it highlighted the need for staff training in relation to the appropriate intensity of radiation for the individual dependent on skin group in relation to sunbed use. It suggested that consideration should be given to a certification process to ensure compliance. This however has not been taken forward.

Even where clients are given information they may choose to ignore it, and if the salon does not stop the client there can be very serious consequences. On August 17th 2017 the Times Newspaper reported the case of a 40 year old woman Caroline Wood who collapsed and went into an induced coma after 2 sunbed sessions in 24 hours⁶⁶. She went to the salon “to get a base colour” before going on holiday to Tenerife. She subsequently collapsed with dehydration at home and fell down stairs. The salon had advised her when after her first session of 8 minutes the next day she wanted a further 10 minutes that this might be too much and indeed salon cards advising waiting 48 hours nonetheless they did not stop her from going ahead.

Fourthly, sunbed emissions remain a major concern. Evidence to the APPG suggested the overwhelming majority of sunbeds did not comply with safety standards and that the total dose of radiation an individual was given, was considerably greater than that indicated by the measurements which were currently used.⁶⁷ The APPG recommended that the Department of Health undertake a study into what is the appropriate method of measuring total dosage and irradiance. It argued existing means of testing by environmental health officers using hand held devices to calibrate measurements was not acceptable and that an agreed method of

⁶⁵ All Party Parliamentary Group on Skin, (n.45) p. 6.

⁶⁶ The Times Monday 17th August 2017 “Woman spent month in hospital after sunbed sessions”.
<https://www.thetimes.co.uk/article/woman-spent-month-in-hospital-after-sunbed-sessions-v17qsqxxf>

⁶⁷ Ibid. p. 5.

measurement should be included in the requirements provided to councils.⁶⁸ Linked to this in terms of safe sunbed use, there is also provision for regulation of the use of protective eyewear. All the jurisdictions require that operators must as far as practicable secure the use of protective eyewear.⁶⁹ The APPG was in favour of use of such protective eyewear, but noted concerns, expressed by Cancer Research UK, that at the present time there was not sufficient authoritative verification as to what was appropriate eye protection and that this needed to be considered when taking regulations forward.⁷⁰ Again it remains the case that nothing has been done in England to date to enact this.

Fifthly, a major question remains regarding the role of local authorities in relation to enforcement. In all the jurisdictions the onus is placed on the local authority to enforce the legislation.⁷¹ The requirements in the legislation are imposed not only on managers of the sunbed premises, but also on ‘bodies corporate’ and can result in directors, managers and company secretaries being held accountable.⁷² However in practice while there has been some local authority enforcement,⁷³ overall both the level and effectiveness of the role of local authorities in this area has been questioned.⁷⁴ One alternative approach to regulation would be that of the mandatory licensing of sunbed premises. The APPG noted the support for this from public health bodies, cancer charities and dermatologists. However there was opposition from the Sunbed Association and in addition one council, Liverpool, stated that it did not have the means to effectively monitor sunbed compliance and would be unable to operate a full licencing process.⁷⁵ The APPG noted that proposals had been made by the Local Government

⁶⁸ Ibid.

⁶⁹ Ss.6 Sunbeds Regulation Act 2010; s.7 Sunbeds Act Northern Ireland 2011.

⁷⁰ All Party Parliamentary Group on Skin, (n.45) p. 5.

⁷¹ S.7 and schedule 1 Sunbed Act 2010

⁷² S. 9 Sunbeds Regulation Act 2010, Sunbeds Act (Northern Ireland) 2011,s13

⁷³ C. Woodhouse, ‘Sunbed salons are fined for letting 15 year old girl use cancer linked machines during city council sting’, *Belfast Telegraph*, 18 August 2015.

⁷⁴ All Party Parliamentary Group on Skin, (n.45) p. 5.

⁷⁵ Ibid. p. 8.

Association to streamline the structures of local authority licencing processes in general which is exceedingly complex.⁷⁶ The APPG supported measures which would facilitate local authorities to undertake licensing on “A voluntary, ‘straight off the shelf’ basis with agreed criteria” rather than mandatory licensing.⁷⁷

While recognising the practical and financial constraints local authorities are working under, it is suggested that reliance on an ad hoc voluntary licencing regulatory structure would be an insufficient response. Instead, moving to mandatory licensing would be a preferable approach and in line with what are the very real public health concerns in this area. Given that local authorities have public health powers under their legal remit under the National Health Service Act 2006,⁷⁸ they should work, along with bodies such as Public Health England and Cancer Research UK, to develop effective licencing processes in relation to sunbed use. However this cannot simply be a matter for local government as it would also require the involvement of central government to ensure that this was properly enforced. But will this be sufficient or is it time for a more radical approach? We turn to consider this in the next section in relation to another jurisdiction which has been extremely proactive in the regulation of sunbed use, that of Australia.

4. Regulation And Prohibition Of Sunbed Use: Australia as a case study

⁷⁶ Local Government Association (2014) Open For Business; Rewiring Licencing, Local Government Association, London.

⁷⁷ All Party Parliamentary Group on Skin,(n.45) p. 8.

⁷⁸ National Health Service Act 2006, s. 2B.

The concerns in relation to skin cancer dangers have led other jurisdictions besides the UK to see the risks associated with sunbed use as a public health issue, and to regulate the sunbed industry accordingly. Here we focus on Australia as a case study in the effective development and use of regulation in this area. This was the result of particular issues associated with Australia: its culture, climate, population demographic, risk, melanoma incidence, and the apparent success of the gradual tightening of restrictions on sunbed use.

Traditionally in Australia, outdoor activities in the sunshine, whether swimming, sunbathing or surfing, were associated with good health and well-being throughout the Twentieth Century. As a result, the tanned body was seen as “healthy” and this led to the growth of use of indoor tanning using a sunbed.⁷⁹ However, the complexion and skin type of a large number of Australians who are the descendants of fair-skinned Europeans, is Type I on a scale of I-VI. This means they have an increased risk of developing sunburned skin and freckled skin with consequent enhanced risk of melanoma, due to the Australian climate and hours of sunshine they are exposed to from childhood.⁸⁰ The Australian government became very concerned regarding the population risk of skin cancer or melanoma from exposure to UVA and UVB sunlight.⁸¹ From the 1980s, for example, a ground-breaking campaign was launched in Australia, initially in the state of Victoria, to reduce sun exposure and sunburn: the Slip, Slop, Slap campaign was used to encourage Australians to slip on a shirt, slop on sunscreen, and slap on a hat.⁸²

⁷⁹ A. K., Day, et al., ‘Australian young adults’ tanning behaviour: The role of ideal skin tone and sociocultural norms’, *Australian Journal of Psychology* version online (2016): 1-9.

⁸⁰ Ibid.

⁸¹ M. McArdle, Sun Sets On Tanning Beds, Queensland Cabinet and Ministerial Directory, 22 December 2014, (statements.qld.gov.au).

⁸² M. Montague, R., Borland, & C. Sinclair, ‘Slip! Slop! Slap! and SunSmart, 1980-2000: Skin cancer control and 20 years of population-based campaigning’, *Health Education & Behavior* 28 (3) (2001): 290-305.

The trigger for regulation in Australia was the increasing evidence globally of deaths from melanoma and the risk to public health of sunbed use, which accumulated throughout the early years of the Twenty-First Century, as outlined above.⁸³ Regulation of sunbed use was initially introduced in Victoria,⁸⁴ South Australia,⁸⁵ and Western Australia in 2008,⁸⁶ stating that those salons providing cosmetic tanning must be licensed, sunbeds must be supervised, and health warnings must be clearly displayed. Both the states of South Australia and Western Australia imposed a total ban on persons under 18 in 2008 and a full ban on those under 18 was introduced in Victoria in 2011.⁸⁷

General national standards were also introduced in 2008 by the Australian self-regulated sunbed industry, which became applicable across both Australia and New Zealand.⁸⁸ These provided for bans on those under 18 using solariums. They also required documents providing evidence of age. In addition they banned those persons who have very fair skin (skin type I) from using their solarium. The standards also required that there was a display of mandatory health warnings. Moreover, solariums were required to provide consent forms including information in relation to the risks of solariums. Customers were required to read and to sign these. Furthermore, solariums were also required to undertake skin assessments for all customers. The management of solariums were required to also ensure that all staff had

⁸³ P., Gies, et al., 'UVR emissions from solarium in Australia and implications for the regulation process', *Photochemistry & Photobiology* 87 (1) (2011): 184-190.

⁸⁴ Victorian Government. Radiation Amendment (Tanning Units and Fees) Regulations 2008 under section 139 of the Radiation Act 2005. Vol. Statutory Rule, No. 148/2007, 2007.

⁸⁵ South Australia. Radiation protection and control (cosmetic tanning units) regulations 2008 under the Radiation protection and control Act 1982, 2008.

⁸⁶ Radiation Safety (General) Regulations 1983, Western Australia, 2008.

⁸⁷ Department of Health Management licence conditions for the possession of a commercial tanning unit. (Melbourne, 2011).

⁸⁸ Australian/New Zealand Standard AS/NZS 2635:2008 (Solarium for cosmetic purposes): Standards Australia/Standards New Zealand, 2008.

completed training in carrying out skin assessments and determining exposure times. Finally, the solariums had the obligation to ensure that protective eyewear was worn by clients. These standards were applied in 2009 and 2010 in New South Wales, Queensland, ACT and Tasmania.

Australian legislation has become more radical over time and states have tightened their restrictions on sunbed use and on the availability of commercial operators of premises offering the use of sunbeds. Victoria passed legislation in October 2013 and New South Wales introduced a ban applicable from 2014. Gradually legislative restrictions were effective in reducing the number of sunbeds available. Between 2006 and 2009 the number of sunbeds dropped by a third, as a result of negative publicity for sunbeds and the introduction of legislation in some states.⁸⁹ However there were still problems with enforcement in a study of compliance with Regulations in 2009 in Melbourne, as, while provision of information about risk by operators to customers had improved, under age consumers and those with fair skin were still able to access sunbeds.⁹⁰

Continuing concern of the risks of skin cancer led ultimately to the complete ban on commercial sunbeds in 2015 for all age groups and all skin types. The ban on ‘commercial solariums’ took effect on January 1 2015 in the Australian Capital Territory⁹¹, New South

⁸⁹ J.K.Makin, & S.J. Dobbinson, ‘Changes in solarium numbers in Australia following negative media and legislation’, *Australia and New Zealand Journal of Public Health* 33 (5), (2009): 491–494.

⁹⁰ J.K.Makin, K. Hearne, & S.J. Dobbinson, ‘Compliance with age and skin type restrictions following the introduction of indoor tanning legislation in Melbourne, Australia’, *Photodermatology, Photoimmunology & Photomedicine* 27, no. 6 (2011): 286-293.

⁹¹ Radiation Protection Solarium Prohibition Amendment Regulation 2014 (No. 31).

Wales⁹², Queensland⁹³, South Australia⁹⁴, Tasmania⁹⁵, and Victoria⁹⁶. Western Australia enacted a ban in January 2016.⁹⁷ There were no commercial solariums in the Northern Territory. Vanessa Rock, from the National Skin Cancer Committee in New South Wales, an Australian public health advocate argued, “This is our greatest opportunity to stop the next generation using [sunbeds] in the first place”.⁹⁸ Sunbeds were surrendered by licensees, and operators received compensation for the loss of their machines and business. Many machines were collected and disposed of by state governments. In addition mechanisms were introduced to enable government departments to enforce the ban and monitor compliance.

Evidence in 2016 appeared to suggest that this ban on commercial sunbeds was a success and was implemented successfully with concomitant long-term benefits to public health. In a study of online tanning bed advertisements before and after the ban, for example, a decline in the number of advertisements was clear showing a reduction in availability of sunbeds.⁹⁹ There is also evidence of enforcement of the statutory prohibitions. So for example, in 2016 an Australian citizen formerly from Adelaide was convicted of providing cosmetic tanning for a fee. Jake Martin-Herde, 28, was charged and prosecuted with offering and providing cosmetic tanning for a fee to the general public. He promoted his business through social media.¹⁰⁰ The Australian example suggests that in some instances total prohibition may operate effectively as

⁹² Radiation Control Regulation 2013.

⁹³ Queensland Radiation Safety Amendment Regulation (No. 1)2012 No. 320.

⁹⁴ Radiation Protection and Control (Non-Ionising Radiation) Regulations 2013.

⁹⁵ Public Health Act 1997.

⁹⁶ Radiation (Amendment Act) 2013.

⁹⁷ Radiation Safety (General) Amendment Regulations (No. 2) 2015.

⁹⁸ M. Howe, ‘Commercial solariums banned in Australia’, *The Lancet Oncology* 16 (2) (2015): e58.

⁹⁹ C. Sinclair, et al., ‘Impact of an outright ban on the availability of commercial tanning services in Victoria, Australia’, *British Journal of Dermatology*, 175, no.2, (2016): 387–390.

¹⁰⁰ Matthew Smith, ‘‘Sharelarium’ cosmetic tanning business owner found guilty in Australian first’ Australian Broadcasting Corporation (ABC) 17 August 2016, <http://www.abc.net.au/news/2016-08-17/solarium-sharelarium-cosmetic-tanning-owner-guilty-adelaide/7752042>.

a public health strategy. Moving from targeting minors, targeting dangerous levels of emissions, and prohibition, as we saw with the intervention ladder of the Nuffield Report, can be seen as part of a continuum. Do we need to go up another rung of the NCOB's Intervention Ladder in the UK? We return to this issue in the concluding section.

6. Conclusions

As we have seen in this article, whilst the UK has made some advances in addressing the public health challenges caused by sunbed use, there is still much yet to do. It is clear that there are real risks to public health here., We have noted that there are a range of approaches which can be deployed to address public health concerns and that in the case of sunbed use it is necessary and justifiable for the law not only to inform but also to regulate and where necessary use enforcement strategies. It is somewhat astonishing that, seven years after the Sunbeds (Regulation) Act 2010 was introduced in England and Wales, implementing regulations remain to be introduced in England itself.

We argue that given the public health risks and related harms associated with commercial sunbed use, and the problems in enforcing the existing legislation in the UK, that it is now time for Parliament to introduce tighter regulation and a move up the intervention ladder in the form of prohibition. The approach taken in Australia provides a clear model for legislators in the UK. There is certainly a need for more robust regulation. Existing prohibitions on minors using tanning facilities, for example, are rendered effectively illusory if, as we have seen above, they can access unattended tanning centres and coin operated tanning booths largely unchallenged. The enforcement of the law by local authorities has clearly been inconsistent, and in some instances wholly ineffective. While licensing can provide one way forward, as we have seen

this approach is limited currently as a result of inconsistent enforcement, and critically there needs to be commitment and funding provided by local authorities. Brownsword and Goodwin's work discussed above, also highlights the importance of resources being spent on enforcement, and this needs to be borne in mind in relation to any future regulation in the UK. This links to a broader question which goes beyond the scope of this article which is the effective suitability of entrusting public health powers to local authorities which have such limited budgets. In an era of austerity, responsibility cannot solely be entrusted to the local level to ensure public health goals are safeguarded.

But would prohibition work in the UK? Brownsword and Goodwin have emphasised in their work the value of preparing the ground to prevent regulatee resistance.¹⁰¹ It may be that the ultimate prohibition of commercial sunbeds was accepted more readily in Australia, despite some initial resistance, for example, as the ground had already been prepared there before legislation was introduced, through the use of public health campaigns in the media which raised awareness of skin cancer. This arguably limited the resistant behaviour of both commercial operators and consumers as Australians were already aware of the risks posed by tanning, either naturally or artificially, by the time of the prohibition of commercial sunbeds. This might have meant that acceptance of the regulation was more likely, and resistance much more easily prevented or contained. While in the past in the UK, however, tanning has been seen as less of a health risk historically due to climate and lack of public awareness, there has been heightened public awareness of skin cancer risks over the last decade and we suggest that this means it is likely that there will be greater acceptance of more restrictive legislation in the UK today. An editorial in *Lancet Oncology* in 2009 made some very prescient comments

¹⁰¹ R., Brownsword, and M. Goodwin, (n.36) pp. 271-2.

‘Most of the 100,000 new cases of skin cancer diagnosed in the UK each year are preventable, so why attempt expensive industry regulation and ineffective consumer education programmes? Sunbeds for cosmetic tanning clearly increase the risk of skin melanoma and probably the risk of ocular melanoma; they should be banned for all ages..... In the name of skin deep beauty a beast has been unleashed - in face of the recognised health risks, the industries’ continued existence can in no way be justified.’¹⁰²

We support these comments and would argue that the aftermath of the legal regulation of sunbeds over the last decade illustrates the need for stronger measures. Given the clear risks also highlighted by the SCHEER opinion and WHO statements noted above¹⁰³, it is surely time for UK legislators to revisit the question of sunbed regulation, and to move further up the ‘intervention ladder’ towards the eradication of the commercial tanning industry through statutory prohibitions on commercial sunbed use such as those which exist in Australia. After all, sunbed use not only remains a question of public health, it can literally be a matter of life and death.

¹⁰² ‘Beauty and the Beast’ *Lancet Oncology* 10(9) (2009): 835.

¹⁰³ Scientific Committee on Health, Environmental and Emerging Risks (SCHEER), at para. 1.8.

