

Public Health in the 21<sup>st</sup> Century

# *Beauty and Health*

A close-up photograph of a woman's face, focusing on her eyes and the area where a mustache is drawn. The mustache is large, dark, and has a stylized, almost theatrical appearance with wing-like extensions. The woman has light-colored eyes and is looking directly at the camera. The background is dark and textured.

*Zenobia C. Y. Chan*  
*Editor*

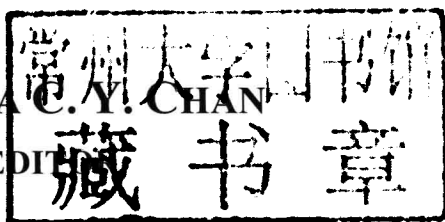
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PUBLIC HEALTH IN THE 21ST CENTURY

# BEAUTY AND HEALTH

ZENOBI

EDIT



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**PUBLIC HEALTH IN THE 21ST CENTURY**

# **BEAUTY AND HEALTH**

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## PREFACE

There are no cosmetic surgery (CS) statistics available in Hong Kong. CS has become popular and common in Hong Kong, especially with the emergence of beauty salons to which clients have easy access. However, there was found to be too little support for those undergoing and becoming addicted to CS, and whose health is affected as a result. Eyelash beauty treatments are assumed to improve ethnic “deficiencies” and bring psychological benefits in terms of femininity, normalcy, and self-management. Frequent treatments and chemical products place stress on the eye and are closely related to a person’s health in general. Eyebrow beauty treatments are commonly available in Hong Kong salons and elsewhere. Nail care should be seen as personal hygiene, but beautiful nails are perceived as a representation of feminine beauty. Recently, artificial fingernails have become very popular in Hong Kong. A lack of literature about nail beauty and women’s health in Hong Kong and elsewhere has been found. Microneedle therapy or skin needling can remove the lipids from cells and increase the hydrophilic molecule diffusion rate coefficient. Hence the anti-ageing approach can be reached. Certainly there are other benefits resulted from microneedle therapy. There are no literature regarding stem-cell cosmetics and health has been published in Hong Kong. Many unexplored rooms and hidden risks of this therapy should be studied. Although stem-cell cosmetics therapy can raise the quality of life

in the coming dominated elderly population, health prevention and education should promote the unbiased appraisal of stem-cell cosmetics at the same time for public before taking action. Anti-aging should be a preventative health care topic in the coming future because of the growing elderly population.

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## *Chapter 1*

# **COSMETIC SURGERY RESEARCH**

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## **ABSTRACT**

A cross sectional study is objected to examine the personal, social and perceptual factors of cosmetic surgery (CS) for women in Hong Kong. 162 Hong Kong women from November 2009 to January 2010 were recruited. A hundred female candidates completed a self-report questionnaire that assessed CS in Hong Kong by snowball sampling. Personal, social and perceptual information were then collected to estimate the risk factors of CS use and addiction. Personal factors including age ( $p=0.000$ ), income ( $p=0.000$ ) and education ( $p=0.000$ ), social factors such as family ( $p=0.001$ ), media ( $p=0.004$ ), atmosphere ( $p=0.018$ ) and acceptance ( $p=0.000$ ), and objection ( $p=0.023$ ) were all positively associated with CS and addiction. It is concluded that risk factors for CS addiction are indicated, which are crucial in offering insights for health education and health promotion on CS with a view to preventing addiction.

## INTRODUCTION

There should be plastic but not cosmetic surgery in Hong Kong. Plastic surgery includes reconstructive surgery and aesthetic surgery, which are performed by specialists in plastic surgery (Hong Kong Society of Plastic, Reconstructive and Aesthetic Surgeons, 2008) who are approved by the Hong Kong Academy of Medicine, HKAM. However, many CS services provided by beauty salons or medical beauty centers (to be generally called cosmetic surgery centers, CSC, below) which are not monitored in Hong Kong. Their experience, trust, and techniques are different. Finally, beauty accidents and complaints will result (Consumer Council, 2007 & 2008).

Customers can easily access CS in CSCs, and the trend of seeking CS is increasing in both mainland China (Watts, 2004) and Hong Kong (Lok, 2007). Former Miss Hong Kong Natalie Ng Man-yan is the first “artificial” actress and a proponent of “cosmetic tours” to Korea, having had CS herself in 2007 (Lok, 2007). Also, the trend is increasing across different age groups (China News, 2008). A ten-year-old girl was afraid of bullying from her classmates and thus urged her mother to accept her double eyelid surgery (The Sun, 2010). People are very accepting because of the growth of surgical techniques and idol presentation (The Sun, 2010).

However, two possible problems directly affecting public health may emerge. First, CS accidents or complaints will increase if CS remains unclear and without any legislation or monitoring. Second, CS addiction will be another problematic issue after drug addiction.

No literature has addressed the issue of CS addiction in Hong Kong. Therefore, this study will explore CS in Hong Kong and aims to enhance the professionalism of related industries by analyzing the existing Hong Kong CS situation, identifying the patients at most risk of becoming beauty junkies, and referring them to in-depth counseling before undergoing surgery to prevent addiction. CS is a hot trend in the medical and beauty fields in Hong Kong (HKACCS, 2007). We foresee that it will be considered part of caring services in the future. This pilot study hopes to give a fundamental understanding of this area to nurses and practitioners.

It was concluded that CS is generally portrayed as a risky but worthwhile option for women to enhance both their physical appearance and emotional health (Polonijo & Carpiano, 2008). Blum (2005) has described the culture of CS. Predictors of young women's interest in obtaining CS were also examined in the Northeastern United States and all were correlated with women's interest in CS (Markey & Markey, 2009). However, no similar studies have been found in Hong Kong.

There has been literature discussing plastic or aesthetic surgery in Hong Kong, but none dealing with CS. Literature about CS addiction is very general, but not in Hong Kong. CS in Hong Kong is now debatable in the city but no literature illustrating the CS and addiction of Hong Kong women has been found. Furthermore, there is no literature about the health risks of CS and prevention of CS addiction. Hence, this study will explore more about the CS of Hong Kong women as females dominate the beauty salons (Hong Kong Trade Development Council, 2001) and give insight to health promotion and education.

We found risks for CS. First, patients often seek the advice of beauticians, family and friends before going to a licensed medical professional for skin treatment (Karnani, 2007). Second, the definition of aesthetic surgery is not clear in Hong Kong. Third, surgeries are not required to be performed by specialists in plastic surgery (Consumer Council, 2008). Fourth, the differences between medical beauty services and CS services are unclear (Consumer Council, 2008). That is why members of the specialty have to accept some of the blame for the misunderstanding and misconceptions surrounding what they do (Kumar et al., 2007). Fifth, misleading advertisements or trade descriptions of services like non-surgical cosmetic treatments can mislead customers into having CS (Consumer Council, 2007). Sixth, both cosmetic and aesthetic surgery can easily cause physical and psychological dependence which produce pleasure and provide an escape from internal discomfort (Goodman, 2006). The above confusion, misleading information, and dependence definitely confirm the importance of knowledge of CS and addiction. We urge health promotion and education on CS. This study aims to fill this knowledge gap in Hong Kong.

## **Definitions of Key Terms of this Study**

“CS” is performed to reshape the normal structures of the body in order to improve the patient’s appearance and self-esteem. “Hong Kong Women” are females of all ages who are Chinese and have lived in Hong Kong over seven years. “Addiction” denotes a process whereby a behavior can function to produce pleasure and is characterized by recurrent failure to control the behavior and continuation of the behavior despite significant negative consequences (Goodman, 2006).

## **METHODS**

### **Study Population and Field Methods**

We recruited 162 Hong Kong women from November 2009 to January 2010 as 12% prevalence resulted in previous study (YWCA, 2004). We used a snowball sampling strategy to respect the sensitivity and privacy of Hong Kong women. Data on personal, social and perceptual factors were collected via electronic anonymous self-administered surveys that were sent to one woman known to be working in the beauty sector by email at the beginning of the study. The response rate was 62%. The study protocol was approved by the Ethics Committee of the Hong Kong Polytechnic University.

### **Data Analyses**

Between January and February 2010, we calculated categorical and dichotomous predictors by Chi-square test in order to test the correlation between surgery and the outcome variables. The categorical variables considered as predictors were the women’s age (year<18, 18-29, 30-50 or >50), marital status (single, married or divorced), income (<HK\$10K, \$10K-19.999K, \$20K-30K or >\$30K), education (secondary, tertiary, or

postgraduate level), and indicators of the CSC, including beauty center, medical beauty center or aesthetic surgery center. The remaining dichotomous outcomes included doctor, family, media, atmosphere, acceptance, safety, injection, happiness, permanency, objection, reason and future. We then obtained the prevalence for each outcome and statistical significance at the  $p<0.05$  level. Next, we tested for magnitude in the factors of CS and addiction by categorical and dichotomous variables using the Kendall tau-b and McNemar tests, respectively. We obtained the value and retained variables that were statistically significant at the  $p<0.05$  level. We conducted all analyses using the SPSS software version 15.0.

**Table 1. Cosmetic surgery study of women from Hong Kong**

	<i>Cosmetic Surgery in Hong Kong</i> <i>n=100</i>					
<i>Personal</i>	<i>Prevalence<sup>a</sup> (%)</i>				<i>Correlates of cosmetic surgery (p)</i>	<i>Correlates of cosmetic surgery addiction (value,p)</i>
Age, years	<18	18-29	30-50	>50	0.038	0.385, 0.000
	4	50	44	2		
Marital Status	Single	Married	Divorced		0.253	-
	77	22	1			
Income, HK\$	<\$10k	\$10k-19,999	\$20k-30k	>\$30k	0.000	0.359, 0.000
	19	40	25	16		
Education Level	Secondary	Tertiary	Post-graduate		0.030	0.398, 0.000
	17	54	29			
<i>Social</i>	Yes	No				
Encouraged by family	20	80			0.000	0.733, 0.001

**Table 1. Continued**

Attracted by media	37	63			0.001	0.478, 0.004
CS atmosphere is good	26	74			0.000	0.462, 0.018
CS is well accepted	50	50			0.013	0.555, 0.000
<i>Perception</i>	Yes	No				
Performed by doctor in any specialty	19	81			-	-
CS in HK is safe	50	50			0.115	-
Botox injection is CS	61	39			0.243	-
Pleasure resulted	48	52			0.000	-
CS in future	30	70			0.000	-
Permanency	32	68			0.105	-
Discrimination after CS	22	61			0.000	0.495, 0.023
CSC	Beauty center	Medical beauty center	Aesthetic surgery center		0.001	0.284, 0.003
	12	35	53			
Reasons	Increase social competitiveness	Increase self confidence	Flaw improvement		0.058	-
	3	41	52			

<sup>a</sup> Totals may be <100 because of missing values.

## RESULTS

Results for the prevalence of personal, social and perception variables are shown. Age, income, education, family, media, atmosphere, acceptance, CSC, happiness, and objection were positively associated with CS, while age, income, education, family, media, atmosphere, acceptance, centers, and objection were the only variables positively associated with CS addiction (Table 1).

## DISCUSSION

As the result of personal variables, we are able to explain the popularity of surgery as being caused by the fact that more and more people who are dissatisfied with their appearance can afford to change their physical appearance (Watts, 2004). The marital status variable was not associated with CS in our study, possibly due to the fact that the social status of females has changed. Married or divorced women may please their husbands or increase their “marketability” by having CS. This may affect the thinking and the health of the next generation.

The results of social variables, phi coefficient and approx. sig. of the family variables were 0.733 and 0.001, which is the highest compared to other variables. As the value of 0.733 is approaching 1, this means there is a very close relationship between family factors and addiction. It was noted that mothers brought their daughters to the clinic and it was probably the mothers who asked them to undergo CS, even though the girls did not really know what they were doing (Lok, 2007) reflecting that the family element must be the core consideration in the health education and promotion of CS.

The rate of CS media attraction, at 37%, was larger than “family” at 20%, but the Phi coefficient and approx. sig. of media were 0.478 and 0.004, not as high as for family (0.733 and  $p=0.001$ ). Although the media effect on use of CS is high, it does not have a strong correlation with CS

addiction. The results from the present study contrast with the previous report of a 20.6% effect by the family and a 13.3% media effect. It may be caused by changes in social norms. A variety of CS advertisements can be found in different media (The Standard, 2006) where are often accused of unrealistic expectations/portrayals of female beauty (Polonijo & Carpiano, 2008). Consistent with our results, other studies have also found a small positive association between CS makeover program viewing and desire to undergo CS procedure (Harrison, 2003; Bandura, 1986). Media depictions have the ability to influence human behavior without our awareness, and to influence individuals' decisions (Alba, 2000).

Social variables, atmosphere (0.462,  $p=0.018$ ) and acceptance (0.555,  $p=0.000$ ) show a positive but not too strong correlation with CS addiction. Interestingly, 74% think the social norm ("atmosphere" variable) of CS is not good, but 50% think CS is well accepted. It may reflect that Hong Kong females think that CS, although not good, is common. Many women around us have undergone CS in secret, as Hong Kong people are still quite conventional. 137 complaints were received by the Television and Entertainment Licensing Authority after the launch of the CS program that supported our result (Singtao, 2007). It is dangerous that the public may not have understood CS well before the operation.

**Table 2. Suicide due to appearance since 2007 in Hong Kong**

Date	Case
2010/03/03	23 years old, Hong Kong University student who has acnes and emotional suffered.
2009/12/16	28 years old teenage who was marred by a dentist in 2001. Got a serious depression and tried suicide twice. Finally he sued the dentist for \$1.7 millions.
2008/09/02	A twelve year old, form 2 girl died because her appearance was against by school.
2007/06/04	14 years old girl who has eczema and was bullied by classmates to cause suicide.



Only a minority answered correctly that CS in Hong Kong can be performed by doctor in any specialty (HKACCS, 2008). This misleads the public into feeling completely safe in undergoing CS and neglecting the health risks before their operation. Health education and promotion should be enforced in these aspects. We also found that 50% agreed that CS in Hong Kong is safe, implying that there is still room for improvement to the image of the CS industry. Also, 61% think Botox or hyaluronic acid injection constitutes CS. Although such injections are non-surgical CS, 39% may disapprove of the “aftermath”. Apart from increasing the public’s knowledge of CS through health education and promotion, it is suggested that the industry cooperate with the media to raise industrial transparency with the goad of smooth development of commercial CS (Fraser, 2003). Additionally, there is still a large portion, nearly 50%, who will not choose an aesthetic surgery center. In fact, CS specialists seldom stay in beauty centers and medical beauty centers. Sometimes, CS is practiced by somebody who is trained only in that area and is not even a medical practitioner. It may also increase the chance of accidents. Crisis management must be undertaken by the industry due to the unclear regulations and legislation. Besides, 32% think CS is permanent. In fact, this is not necessarily the case. The biological composition of the body cannot be fully controlled or manipulated because it is embedded in physical limitations that influence one’s appearance (Ricciardelli & Clow, 2009).

Nearly 50% think CS can give you pleasure and affects your normal daily activities, which shows the potential to become addicted. From our findings, 27% have tried CS and 30% will consider trying it in the near future. It is observed from the three-way cross-tabulation that 19% have had CS and been satisfied with the results, and will try it again in the near future. The Phi coefficient is 0.558 and approx. sig. is 0.000, showing a strong correlation among the three predictors with significance. People may suffer Body Dysmorphic Disorder, which may lead to further aesthetic surgery (Reich, 1991).

52% think CS is caused by flaw improvement; 41% would like to increase their self-confidence, and 3% would like to increase their social