ANTI-ASTHMATIC DRUG USAGE AND MORTALITY TRENDS IN HONG KONG

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Asthma prevalence and mortality are of worldwide concern. Recent consensus guidelines stressed the importance of inhaled versus oral treatment, with early use of prophylactic inhaled steroids; inhaled β-agonists being advocated for symptomatic treatment only. Since 1990, there has been a concerted, ongoing educational effort by respiratory physicians and clinical pharmacologists to implement the above guidelines. As in a previous study,[1] registered wholesalers of anti-asthmatic drugs in Hong Kong (HK) were contacted by the Pharmaceutical Services, Department of Health. Relevant sales data (1992-94) pertaining to a) hospitals and clinics and b) general practitioners and retail dispensaries were retrieved (86%). Such data was expressed as Defined Daily Doses (DDDs)/1000 inhabitants/day and compared to previous findings. Asthma death certification statistics were also retrieved for the years 1983-94 from the Hong Kong Census and Statistics Department. Compared to earlier usage (1984-86), more recently (1992-94), overall DDDs/1000 inhabitants/day of anti-asthmatic drugs had increased by 82%; consistent with an increasing prevalence. Correspondingly, the proportional use of inhaled steroids increased from 3% to 22%. For persons <45 years old, average numbers of certified asthma deaths per year in Hong Kong are shown in the table.

	1983-91	1992-94	p
Females	10.2	8.6	0.30
Males	20.7	15.3	0.05
Total	30.9	23.9	0.03

These findings indicate that despite an apparent increase in asthma prevalence, an increased proportional usage of inhaled steroids was associated with decreasing asthma mortality.

1 Kumana et al; Resp Medicine 1989; 83:343-348

BODY COMPOSITION OF YOUNG CHINESE ADULTS BY BIOELECTRICAL IMPEDANCE ANALYSIS

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Aim: The proportion of body fat and obesity has a direct bearing on the risk of cardiovascular diseases as well as the distribution of fat and water soluble drugs. Determination of body composition with the Lukaski Equation using a bioelectrical impedence analyzer (BIA) was developed for Caucasians, but there is a lack of information on different Chinese population. In this study, body composition of young Chinese adults were investigated to compare weight, body mass index (BMI), and percent body fat (F%) as indicators of obesity. *Method:* 43 healthy Chinese adults, aged 21-24yr, from a medical university of Hangzhou were recruited. Ideal body weight and BMI were derived from weight and height, and body composition was determined by tetrapolar impedance method. Criteria of low, normal and high F% for males and females are <12, 12-18, >18 vs. <20, 20-26, >26 respectively. *Results:* Male and female subjects had similar BMI, although the former were heavier and taller on average. Males' waist circumference and waist:hip ratio (WHR) were larger than females'. However women had more body fat and lower lean body weight (LBW). Main results were as follows:

	male (n=22) (Mean±SD)	female (n=21) (Mean±SD)	p value
weight (kg)	57.08±5.30	50.83±0.87	<0.01
BMI	19.57±1.6	19.66±1.9	>0.05
WHR	0.78±0.03	0.70±0.03	>0.05
LBW (kg)	48.99±4.62	37.50±3.66	<0.01
F%	14.46±2.7	25.67±2.67	<0.01

Using BMI or F% criteria in men there was no significant difference in the frequency of abnormal values. In contrast, 9 female subjects were obese by F% criteria, but only two of them were overweight. And there was a significant difference in the frequency of obesity in women whether BMI or F% criteria were used (χ^2=7.88, p=0.005). *Conclusion:* BIA revealed occult obesity in young Chinese women with normal to low body weight.