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 EDITORIAL
 

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## Targeting the Workplace for Cervical and Mammary Cancer Screening?

Assuming efficacy of screening for early lesions in the cervix, as well as the mammary gland and other organs (Makino et al., 1995; Hisamichi et al., 2000; Ng et al., 2000; for a recent reviews see Tsuda and Moore, 2002 and Vainio and Bianchini, 2002) targeting women for early detection of cancer development is clearly a high priority. In Asia, the continuing increase in breast cancer, as highlighted by Yeole and Kurkure (2003) in the present issue of the APJCP, and evident in the literature for India and China (Sen et al., 2002; Hao et al., 2002), points to the need for particular attention. The question of the most efficient means of accessing the target population remains unclear. In another of the papers in the present issue, Hamashima and Yoshida (2003) look at factors for introducing a screening program into the workplace and conclude that effectiveness of the methods is the most important.

Most of the research in workplace-based screening has been performed in the US, with emphases on risk perception (Cornfeld et al., 2002), role of occupational and environmental health nurses (Coughlin et al., 2002), ways to increase compliance (Hart et al., 1998; Tillet et al., 1999; Allen et al., 2001), sociodemographic factors (Myers et al., 1997) and efficiency (Schrammel et al., 1998). Although worksite health promotion increased in the 1980s, the prevalence of worksites offering cancer screening unfortunately appears to have declined from 1992 to 1995 (Anonymous, 1997) so that more emphasis on both economic and health benefits appears warranted (Griffiths et al., 1996; Campbell et al., 2002).

Specifically in the Asian setting there has been stress placed on knowledge, attitudes and behaviour (Sadler et al., 2001) and the possibility of using local volunteers to facilitate actual screening and compliance (Mathew et al., 1996). A great deal could be achieved by increasing the level of awareness and promoting self-examination (Singh et al., 1999). As emphasized in the present issue by Türkistanlı et al (2003), there is an important role for nurses and midwives.

If the workplace is to be considered as a site for screening interventions, one aspect that needs to be taken into account is the age-dependence of cancer development and the fact that senior citizens are generally no longer within the working population. If the vast majority of the tumor burden is not accessible to early detection in the workplace then other approaches might be more worthy of emphasis. In the Table, data for the relative burden for breast and cervical cancers across age-groups are summarized for representative cancer registries within Asia. With mammary gland tumors the peak is in the 45-54 year group, whether in China, India, Japan, the Phillipines, Thailand or Viet Nam. For cervical cancers there is greater variation between countries, and in China it is predominantly the aged which are affected. However, in the high incidence countries, younger age groups have the greater burden. Cancers in individuals aged 35-44 would also appear to account for a significant proportion of the totals for both organ sites so that they should be clearly included in those screened. Naturally we have to bear in mind that the actual number of people requiring screening becomes reduced with age, but the figures would

**Table. Burden of Cervix and Mammary Cancers by Age Class\* - Data from Selected Cancer Registries#**

Registry Age class	Mammary Cancer					Cervical Cancer				
	25-34	35-44	45-54	55-64	65-74	25-34	35-44	45-54	55-64	65-74
Tianjin	4.5	15.5	15.8	13.5	6.9	0.1	0.3	1.0	3.2	4.1
Madras	1.8	8.2	9.7	7.6	4.4	4.4	12.4	18.6	14.9	6.1
Osaka	1.9	13.3	21.6	14.7	10.5	1.5	4.8	5.8	5.5	4.9
Manila	5.0	15.8	16.8	12.9	7.0	2.9	7.9	7.8	5.3	3.4
Khon Kaen	1.3	4.5	4.5	2.8	1.1	2.7	7.2	10.2	7.2	1.1
Hanoi	2.7	9.1	11.0	5.1	1.1	0.7	2.7	3.1	1.7	1.0

\*Incidence/100,000 x percentage of the female population

# Data from Parkin et al., 1997

suggest that targeting women in the worksite will also be advantageous in Asia. The number of years of life which could potentially be saved is also naturally greater with younger age groups. Unfortunately, even in the developed world the amount of research being conducted into practical intervention, targeting professionals or screenees to increase participation in screening programs is only a small percentage of the total (Moore et al., 2003). The type of work exemplified by the paper of Hamashima and Yoshida (2003) clearly deserves more stress, perhaps within the context of the Practical Prevention Program advocated by Tajima et al (2001). The best balance between workplace-based and other community-based intervention measures remains to be elucidated, taking into consideration culture and level of economic development. The APOCP has an important role to play in this endeavour.

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