

Slide 1



13th World Conference on
Tobacco or Health
Washington DC, US

Friday, 14 July 2006

Social science that makes a difference



Slide 2



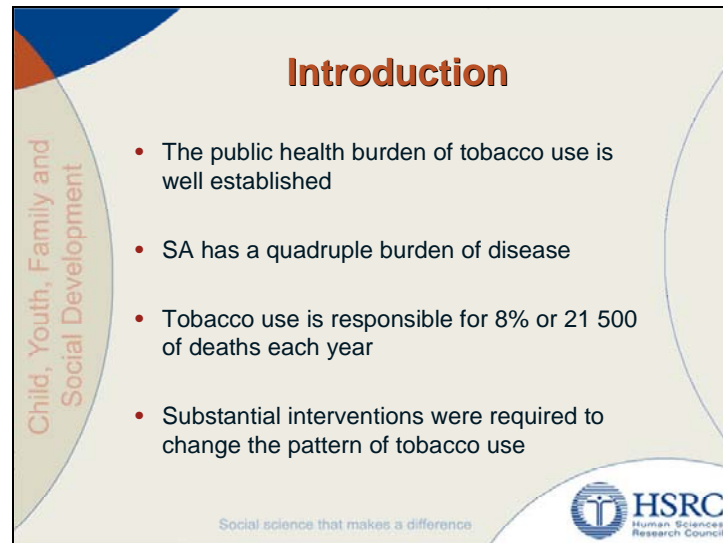
Thank you, Chair. Good afternoon colleagues.

I want to start off by acknowledging my co-authors, Prof Linda Richter who is the Executive Director of CYFSD and the Principal Investigator on the Bt20 Study,

Dr Shane Norris, the Project Director on the Bt20 Study,

Gerard Boyce, an economist in our office at CYFSD, who helped me with the statistics,

and Dr Derek Yach, who was involved at the inception of the then Bt10 study in South Africa and who helped with the conceptual idea for this paper.



The slide is titled "Introduction" in a bold, orange font. On the left side, there is a vertical text label "Child, Youth, Family and Social Development" in a light orange font, positioned next to a decorative graphic of overlapping blue and orange shapes. The main content consists of four bullet points in black text, each preceded by a red dot. At the bottom right, there is the HSRC logo, which includes a stylized 'H' and 'S' inside a circle, followed by the text "HSRC Human Sciences Research Council". At the bottom center, there is a small tagline: "Social science that makes a difference".

Introduction

- The public health burden of tobacco use is well established
- SA has a quadruple burden of disease
- Tobacco use is responsible for 8% or 21 500 of deaths each year
- Substantial interventions were required to change the pattern of tobacco use

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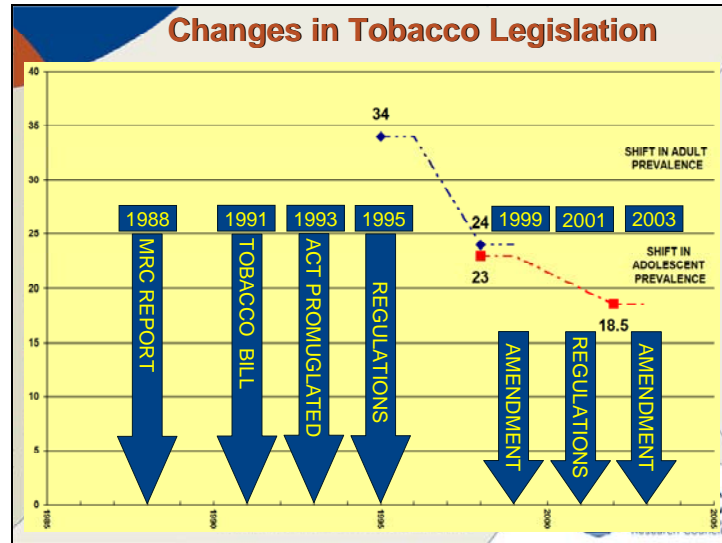
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There is no need for me to convince this audience of the importance of tobacco control, I'm talking to the converted, but I want to place tobacco control in context in South Africa by referring to the mortality pattern in the country.

SA has a quadruple burden of disease. In 2000, it was estimated that 30% of deaths were attributable to HIV, 21% to non-communicable diseases, 12% to injuries and 37% to communicable diseases of which tobacco use is a major risk factor.

Recent estimates indicate that tobacco use is responsible for 8% or 21 500 deaths each year.

As far back as the 80s researchers at the SA MRC, realized the importance of using research to highlight the impact of tobacco use and to lobby for enabling legislation.



That is exactly what they did. The MRC published a seminal report on the health and economic impact of tobacco use, showing rising prevalence and that the costs of smoking far outweighed the benefits. The report also highlighted the importance of increasing price as part of a comprehensive strategy to decline smoking rates.

A lobby group called the Tobacco Action Group, consisting of the National Council Against Smoking, the Cancer Association of South Africa and the Heart Foundation was formed in 1991 to raise public awareness of the need for tobacco control.

As a result of these initiatives a draft tobacco bill was introduced in 1991 but because of the extent of the influence of the industry on the ruling party, its publication for comment was delayed.

Eventually, the act was passed in 1993 and focused on among others:

- Regulating smoking in public places
- Prohibited sales to under 16s
- Regulated advertising i.t.o. labeling

But it was far from comprehensive and a significantly watered-down version:

- The definition of Advertising did not include radio advertising,
- Smoking in public places was not banned completely and the definition did not include workplaces,
- And Enforcement of the law was not dealt with adequately.

In 1994 the country transitioned to a democratic dispensation with a government and health minister determined to push through tobacco control reforms. The Minister of Finance joined the party by consistently increasing excise taxes over time. Studies report that in the 1990s cigarette price increases exceeded inflation by 8 percentage points each year. So compared to the basket of goods that could be bought for a set amount, cigarettes were becoming an extremely costly product.

The regulations of the act came into effect in 1995 and health warnings were introduced, but the industry used various strategies to limit the effect of the health warnings.

Between 1995 and 1998, with amendments to the act imminent, what took place was a public debate on the merits of the legislation between

government, the tobacco control activists, the industry and their allies including the hospitality industry.

At the same time, the HSRC and the MRC continued conducting a number of KAP studies and this data demonstrated the increasing support of the public for tobacco control legislation.

The amendment act was promulgated in 1999. Among others, it:

- Prohibited advertising, promotion and free distribution of tobacco products
- Restricted smoking in public places including workplaces
- Prescribed levels of tar, nicotine and other constituents
- Created space for mechanisms to enforce the law

The regulations to the act came into effect in 2001, and by 2003, government had proposed amendments to the act to close loopholes that the industry was exploiting including a ban on indirect advertising and to bring the law in line with the FCTC by increasing the threshold age of smoking from 16 to 18 and banning words such as mild, light etc.

Well what has been the impact of these policy changes?

Various cross-sectional studies have reported that adult smoking prevalence has declined from 34% in 1995 to 24% by 1998.

Similarly adolescent prevalence has declined from 23% in 1999 to 18.5% by 2001.

Aim

- To investigate the impact of the tobacco control legislation on adult smoking prevalence using the Bt20 longitudinal data

Child, Youth, Family and Social Development

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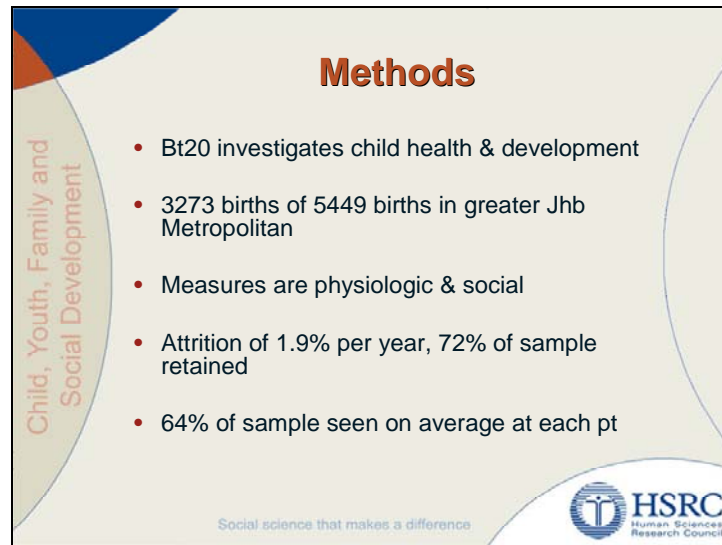
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So why this paper?

Bt20 is a longitudinal study following a birth cohort of children and indirectly their caregivers since 1990, one of the longest ongoing studies in Africa. They are known as Mandela's children as the cohort was started from around the time Mandela was released in April 1990.

As I have outlined in the previous slide, massive changes in legislation were taking place in the 1990s and the study would have been ideally placed to track these changes especially since it recorded data on smoking levels among caregivers.

Well in theory a good idea and an extremely exciting concept, but things went a little pear shaped from there onwards. I'll tell you why shortly.



The slide is titled "Methods" in a bold, orange font. On the left side, there is a vertical text label "Child, Youth, Family and Social Development" in a light orange font, positioned next to a decorative graphic of overlapping blue and orange shapes. The main content is a bulleted list of five points. At the bottom right, there is the HSRC logo (Human Sciences Research Council) and the tagline "Social science that makes a difference" in a small, light blue font.

Methods

- Bt20 investigates child health & development
- 3273 births of 5449 births in greater Jhb Metropolitan
- Measures are physiologic & social
- Attrition of 1.9% per year, 72% of sample retained
- 64% of sample seen on average at each pt

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Just some background on the study:

Bt20 set out to study child health and development and enrolled a cohort of mothers and their children born over a 7 week period at public health facilities, predominantly in Soweto, and who resided in the area for at least 6 months post delivery.

Of the 5449 live births in the area, 3273 were enrolled as part of the Bt20 cohort.

Over the past 15 years, the study has tracked physiologic, social, economic and behavioural data from caregivers and their children.

Remarkably, on very limited resources especially in the first 10 years of the study, attrition has been kept to a low of 1.9% per year. After 15 years, 72% of the sample has been retained.

The greatest challenge to the study is migration, particularly circular migration, so that on average 64% of the sample is seen at each data collection wave.

From 13 years of age, the sample is seen twice a year, once at their home and once at the Bt20 site.

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Methods continued

Child, Youth, Family and Social Development

Sample Characteristics:

- Pop Group : African (78%)
- Age : 20-38 (82%)
- Marital Status: Single (55%)
- Residence : Soweto (74%)
- Education : Secondary (73%)
- SES : 20.3%, 63.6%, 16.1%

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Who makes up the Bt20 caregiver cohort?

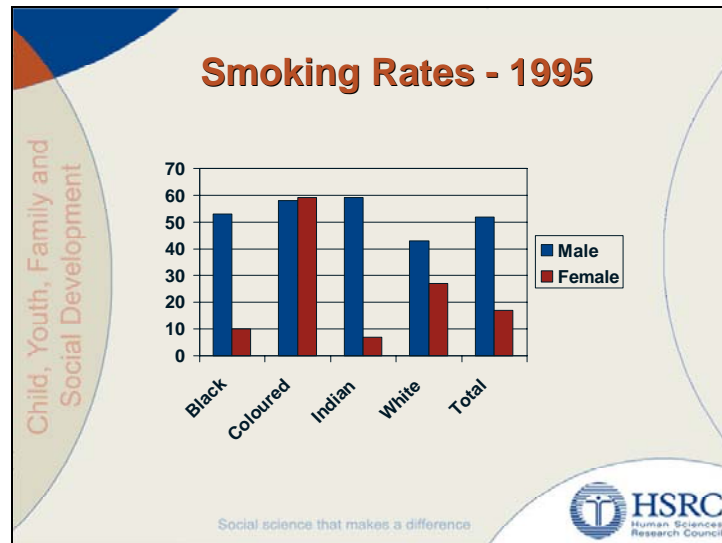
The sample is predominantly African Black women – for whom smoking rates have been relatively low. And this is where the smoking study runs into difficulty?

Switch to smoking rates 1995 slide

So in effect, we are starting from a very low base and substantial numbers would be required to demonstrate changes with authority. Unfortunately, we don't have this power in the Bt20 study for which caregivers are not the primary target group.

Nevertheless, in 1990, this cohort of women were described as follows:

Slide 8



From this slide we see the distinct differential between male and female smoking rates, driven primarily by the low smoking rates among Black and Indian women at around 10 and 7% respectively.

Smoking prevalence - Bt20 Households

	1992	1995*	1997	2000
Household (n=670)	6.1	5.7	5.2	5.7
Mother (n=323)	5.5	-	5.6	5.0

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The study asked about daily and occasional smoking and this is reflected in the table. Caregivers are members of the Bt20 household who responded to the questionnaire, in 70% of the cases at a cross-sectional level at least, this was the mother.

We were able to use the data of 670 households for which data was available at the four time points and 323 mothers at 3 time points. 1992 data referred to partner smoking so was not relevant for mother smoking.

What we do find is that the smoking rate remained fairly consistent across the four time points around 5% but the n's are pretty small because of the low base of smoking, hence I'm hesitant to make any conclusions based on this data.

However, the data did raise a number of questions for me.

Discussion

Did the legislation have differential impacts on subgroups of the population?

HSRC/MRC data shows biggest decline for Black & Indian females

- HSRC /MRC (95) : 10% daily
(96) : 13%
(98) : 3%
- SADHS (98) : 4%

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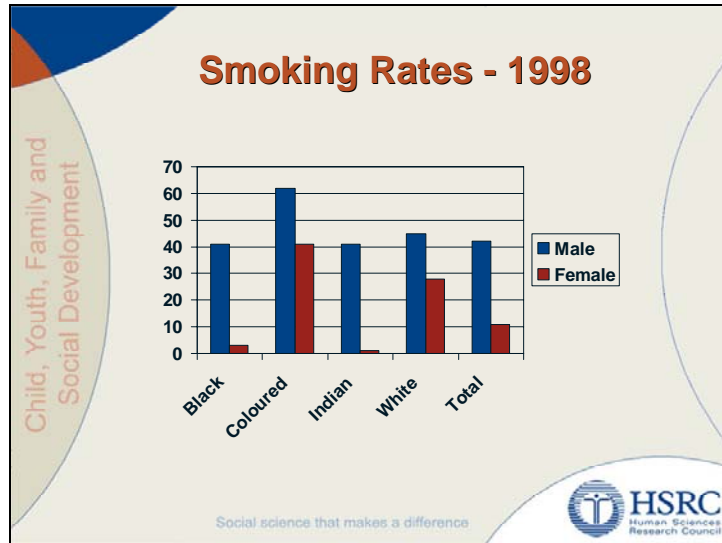
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We know from the cross-sectional data that overall smoking rates declined, but the question I asked was, who did it decline for and in particular what was the effect on Black women?

Well, looking at other studies, I did not get a clear answer.

The HSRC/MRC data shows that smoking rates among Black women rose from 10% in 1995 to 13% in 1996 and dropped to 3% by 1998. The report indicates that the biggest decline in smoking rates were in fact for Black and Indian women. For the latter group, rates dropped from 7% in 1995 to 1% by 1998.

The first SADHS was conducted in 1998 and also reported a daily smoking rate of 4.2% among Black women and around 5% of daily and occasional smoking, similar to what we found in Bt20.



This slide shows the low smoking rate among women in general and in particular among Black and Indian women.

Discussion continued

Van Walbeek ('05) – AMPS data

- Decline among African, Coloured, males, young and the poor

	<u>1993</u>	<u>2002</u>
White	36.0	35.8
African	28.4	19.5
Coloured	50.9	43.9
Indian	31.5	28.6
Male	51.8	39.0
Female	13.2	10.1

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Another data source, using the All Media Products Survey data, indicates that the biggest decline in smoking rates has been among African and Coloured people but particularly among males and not females, unlike the HSRC/MRC data.

As we saw in the previous slide, smoking rates among females are driven primarily by the smoking rates of Coloured and White females. Unfortunately, the data was not disaggregated by race and sex, so we could not comment on the smoking rates among Black women?

So, we do not have a definitive answer on the impact of the legislation on smoking rates among Black women.

More Questions than Answers?

- Have we reached the threshold level of smoking for this group and for Indian women?
- Should the focus be on prevention for this group?
- Do we expect smoking levels to increase among Black women?
- What are the resiliency or protective factors in this group?

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So what can we conclude from the exercise?

The bt20 data is limited at best, but like the other studies, seems to indicate that we have reached a threshold level of smoking for Black women and Indian women.

Given the low smoking rates in these two groups, they could easily fall of the public health radar.

The question is, do we expect smoking levels to rise among Black women and Indian women, given the cultural factors that make smoking a taboo and hidden activity in this group?

For younger Black and Indian women, the answer is a resounding yes. A 2003 study on smoking among young adults aged 18-35 indicate rates of 8% and 19% respectively. The study also concluded that substance use including

tobacco use is increasing among those young people with access to education and disposable income. So it could be even higher for these subgroups.

And my economist colleague, Dr van Walbeek, tells me that since 2000 the economy has improved, with access to disposable income increasing. What is more the rate of increase in cigarette prices is not as high as it was in the 1990s.

So as the social and economic context changes - the so called socializing and protective effect of culture – it is reasonable to expect smoking rates to increase.

For now, we need to put in place prevention programmes to keep smoking rates low in the group and dedicate research to understand the protective or resiliency factors that have kept rates low in this group with the hope of replicating these factors for the young age group.