



Investigating the benefit of a novel HIV/AIDS information workbook as a teaching aid in a school life-skills program in the Western Cape, South Africa

Diane Gray¹, Anne Betzel¹, Lesley Workman², Paul Roux^{1,3}

¹G25 Paediatric HIV/AIDS Service, Groote Schuur Hospital, Cape Town, South Africa

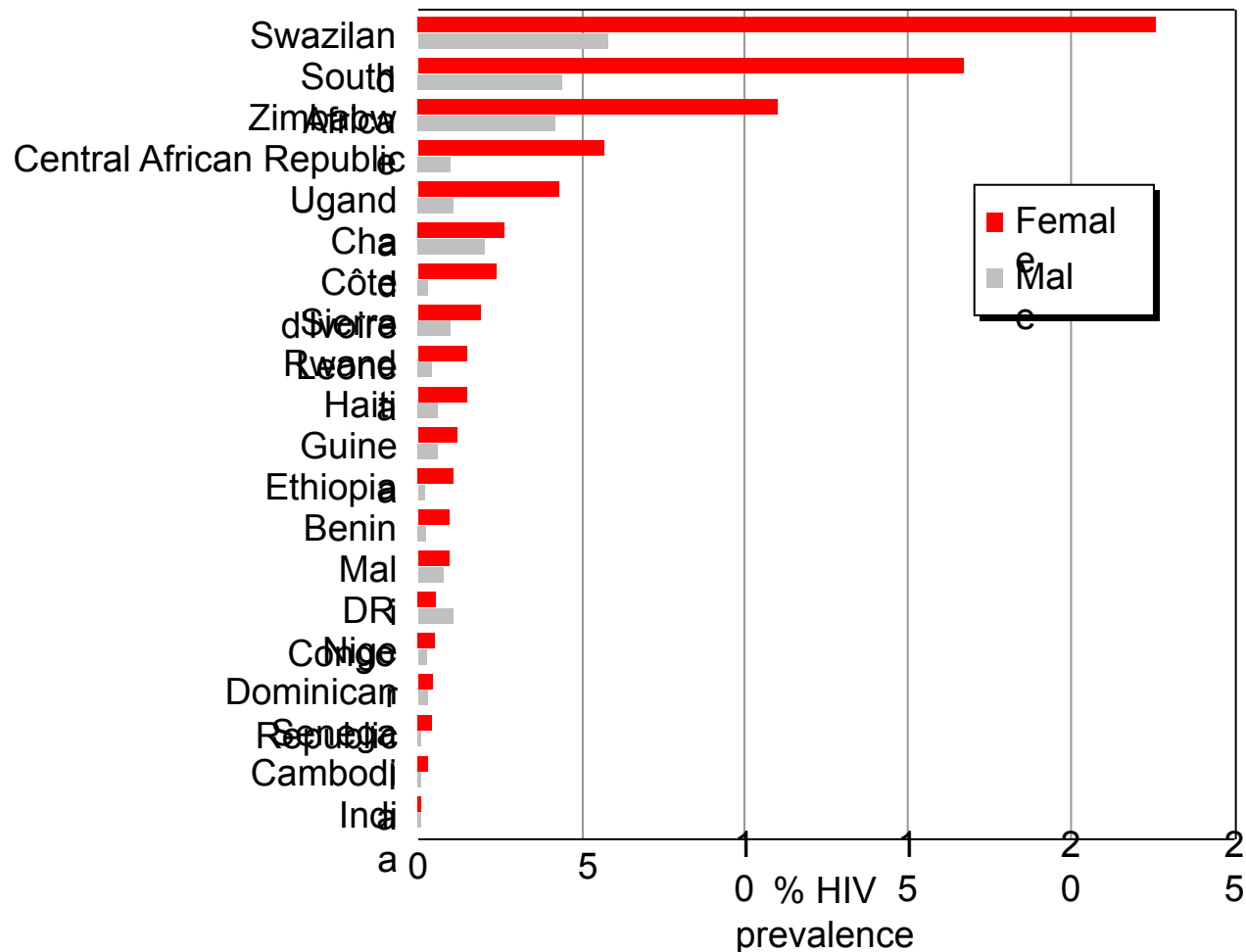
²South African Tuberculosis Vaccine Initiative, University of Cape Town, South Africa

³School of Child and Adolescent Health, University of Cape Town, South Africa

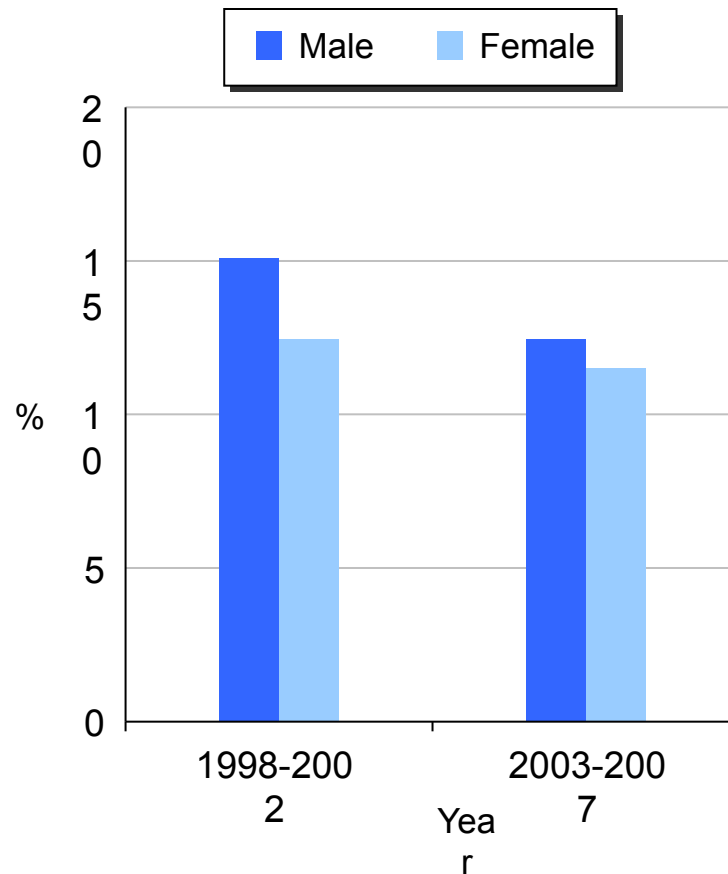
Background

- South African adolescents are at high risk of infection with Human Immunodeficiency virus (HIV)
 - High community HIV prevalence
 - Adolescents experiment and take risks
 - Adolescents have sex

HIV prevalence (%) among 15–24 years old, by sex, selected countries, 2005–2007

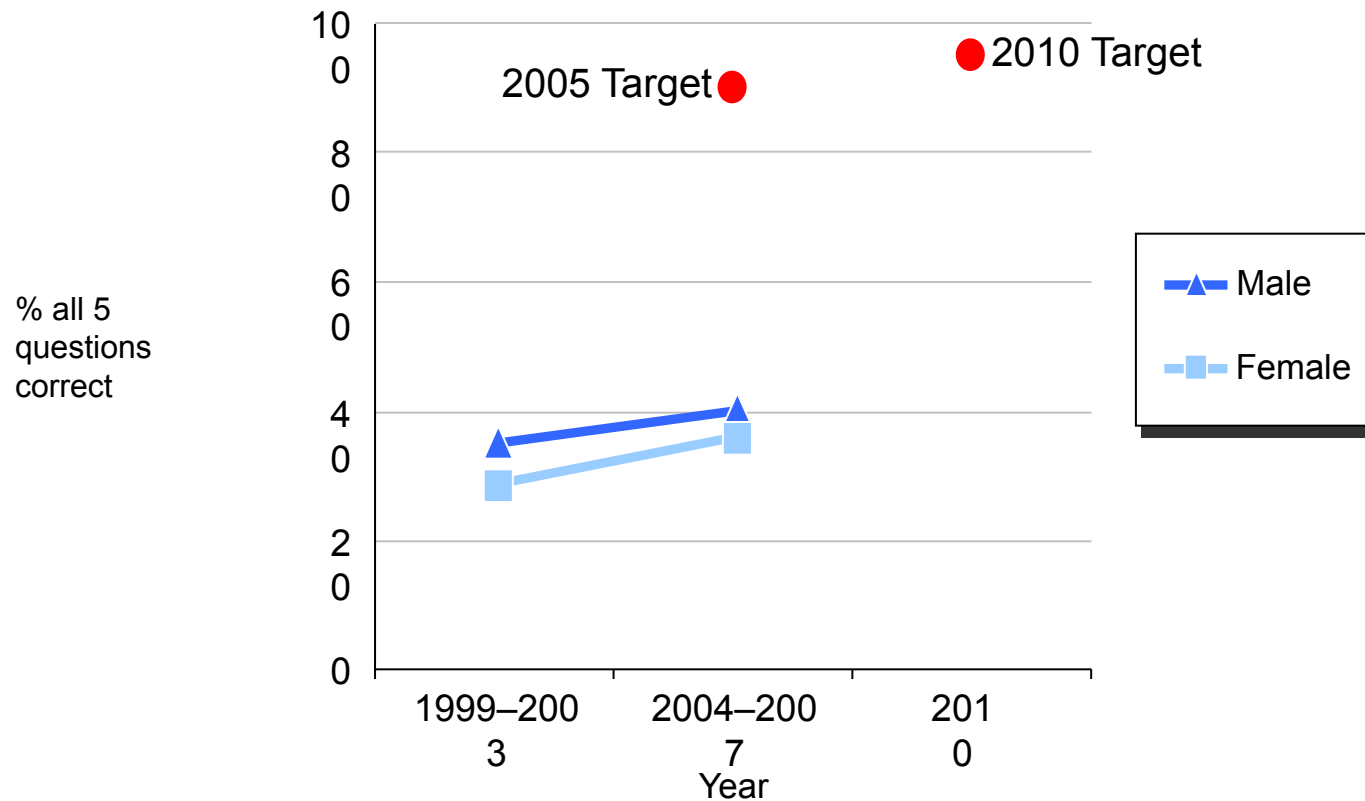


Percentage of young people who have first sex before age 15, by sex

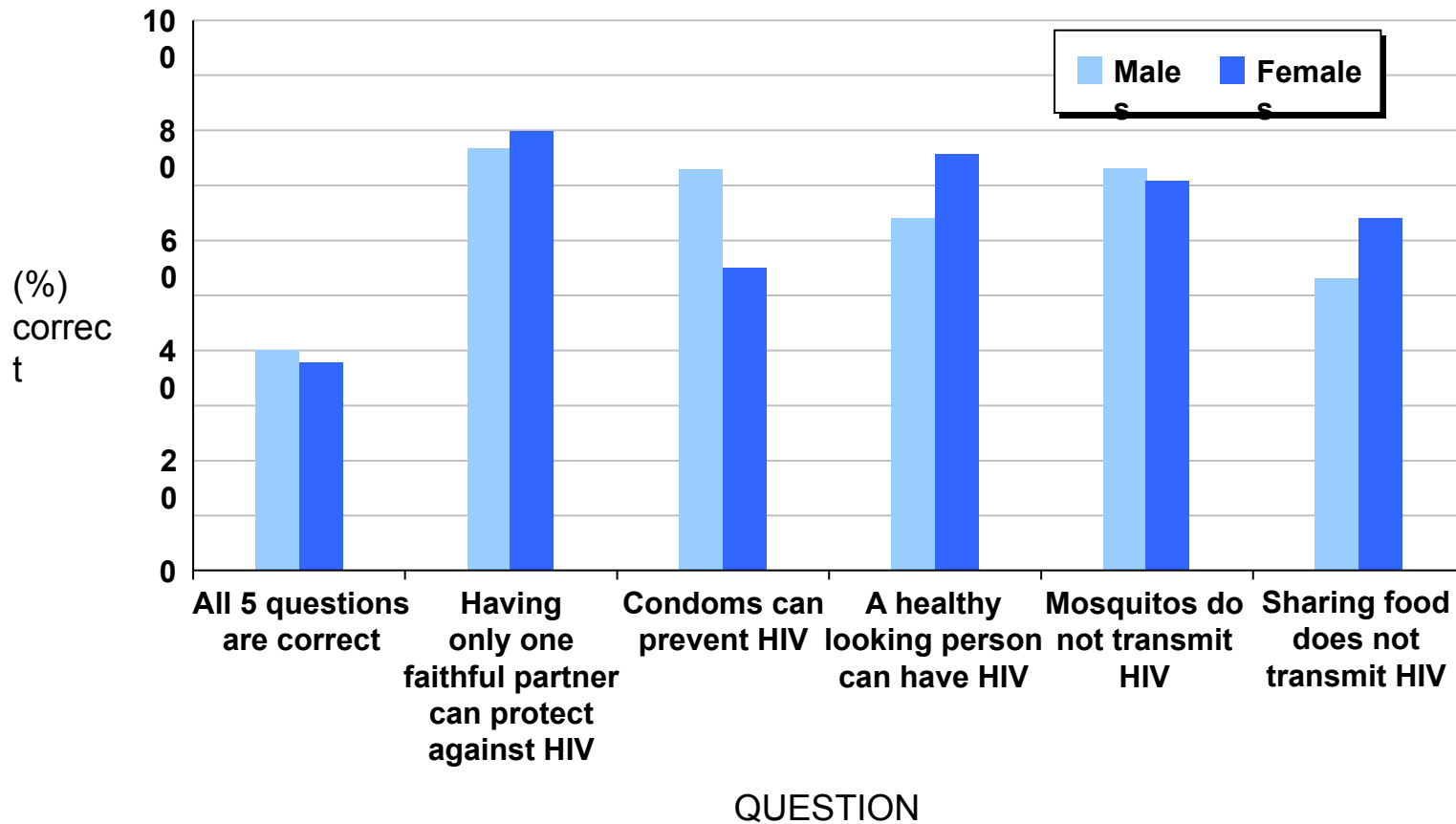


- A higher level of HIV-related knowledge may
 - Raise appropriate concern about personal risk
 - Increase likelihood that sex partners discuss HIV/AIDS
 - Contribute to demystifying conceptions that reinforce negative stigma

Comprehensive knowledge of HIV among young people (ages 15–24), 1999–2007



Comprehensive knowledge of HIV among young people, by type of question



- Previous studies have suggested that HIV/AIDS education in both junior and high schools has a positive effect on:
 - adolescents' HIV/AIDS related knowledge
 - attitudes toward people with HIV/AIDS
 - shift in subjective norms and behavioural intentions toward having sexual intercourse
- **Improving adolescents' HIV/AIDS knowledge and understanding is desirable**

Aim

- To investigate the impact on adolescents' HIV/AIDS related knowledge of the Extra Time information workbook used in a high school life-skills program



Method

- Conducted in a high school in the Cape Town metropolitan area
- All classes in each grade (8-12) completed a Knowledge Questionnaire
- The Extra Time workbook was introduced into the life skills curricula of randomly selected classes in each grade (8-12) at the school.
- The questionnaire was completed 6 months later after completion of the life skill classes by grade 8-11. The grade 12 classes did not participate in follow-up.

Method

- Written parental consent was required in order to participate
- Ethics approval was granted by the University of Cape Town Research Ethics Committee
- Permission to conduct study was received from the Department of Education and the School Health Service of the Dept. of Health of the Provincial Government of the Western Cape

Extra Time Magazine



Developed in 2005 by **Grassroots Soccer**, Sports for Life, AED, Health Communication Partnership, USAID and John Hopkins University Communication Programs

www.grassrootsoccer.org

Knowledge Questionnaire

- Section 1
 - 22 biological questions
- Section 2
 - 22 life style questions
- Anonymous
- age, gender and grade recorded

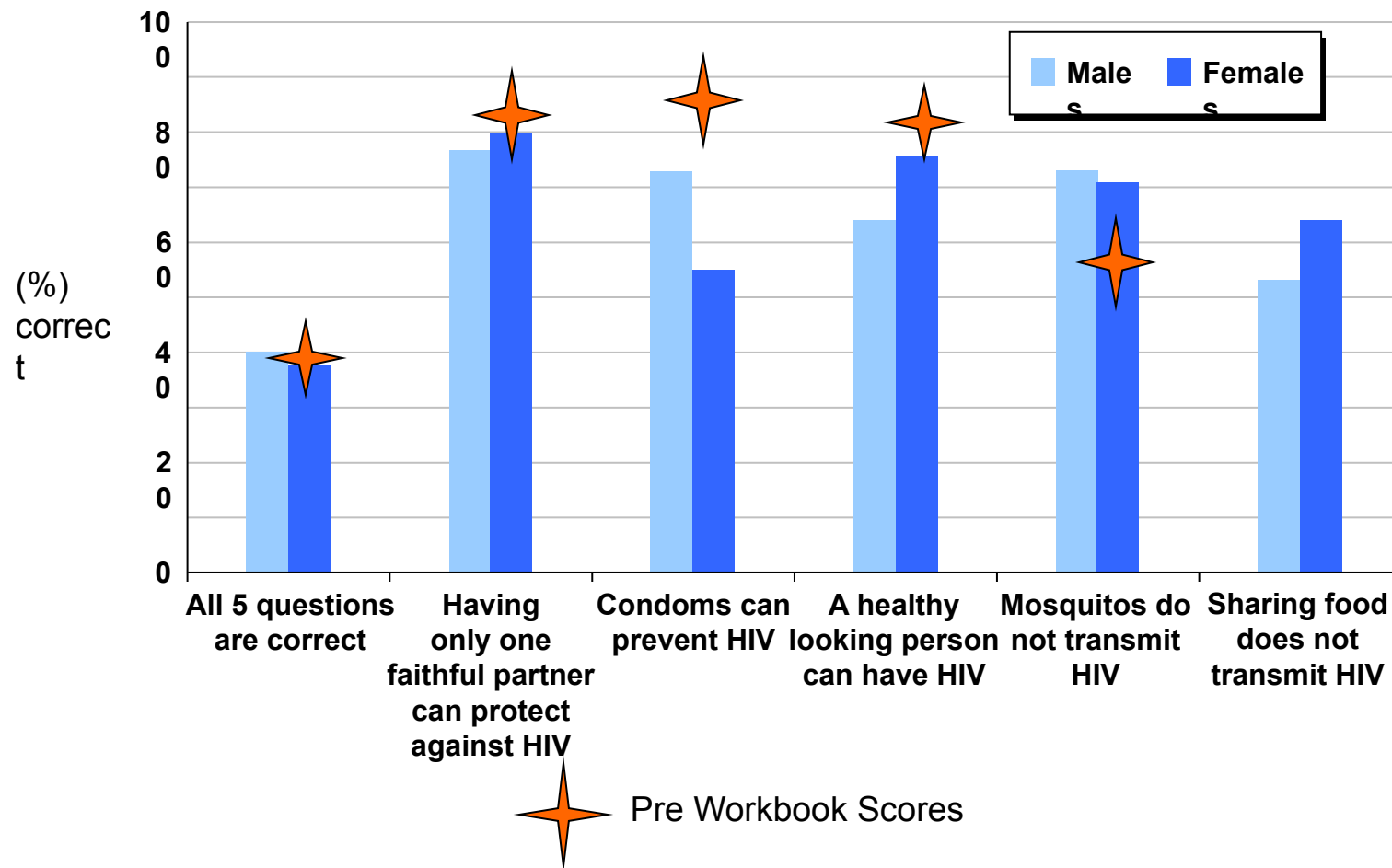
Results

- 966 adolescents completed the initial knowledge questionnaire
- 137 adolescents from 4 classes (1 each from grade 8-11) received the Extra Time workbook as life skills teaching
 - 8g, 9a, 10d, 11a
- 135 participant adolescents and 343 adolescents from 11 comparison classes completed the repeat knowledge questionnaire after 6 months
 - 9b, 9f, 10a, 10b, 10c, 10e, 10f, 10g, 11b, 11c, 11d

Pre-Workbook Questionnaire Scores by grade

	Female N(%)	Age Mean (SD)	Score out of 22 for biological section Mean (%)	Score out of 22 for life style section Mean (%)	Overall score out of 44 Mean (%)
Grade 8 N=278	124(46%)	14(0.7)	11.4 (57%)	14.3 (65%)	25.7 (58%)
Grade 9 N=182	95(52%)	15(1)	11 (50%)	14.2 (65%)	25.4 (58%)
Grade 10 N=223	110(51%)	16(1.2)	12 (55%)	15 (68%)	26.7 (61%)
Grade 11 N=152	91(60%)	17(1.3)	14 (64%)	17 (77%)	31 (70%)
Grade 12 N=131	78(60%)	17(0.9)	14.6 (66%)	17.2 (78%)	31.8 (72%)
Total N=966	498(52%)	15(1.7)	12.3 (56%)	15.2 (69%)	27.5 (63%)
Kruskal-Wallis p value			P<0.001	P<0.001	P<0.001

Comprehensive knowledge of HIV among young people, by type of question



Demographics of participant and comparison groups

	Participant Group N=135	Comparison Group N=343	Total N=478	
Age mean yrs (SD)	15 (1.2)	16 (1.5)	16 (1.5)	p<0.05
Females (%)	76 (56.7)	196 (57.3)	272 (57)	P=0.39
Grade 8	41	0	41	
Grade 9	24	64	88	
Grade 10	28	175	203	
Grade 11	42	104	146	

Comparison of pre-workbook Knowledge Questionnaire scores in participants and non-participant classes

	Participants N=137	Non participants N=829	T-test p value
Biological score Mean (SD)	12.5 (3)	12.3 (3.3)	P=0.48
Life skills score Mean (SD)	15.5 (3.6)	15.2 (4)	P=0.37
Overall score Mean (SD)	27.9 (6)	27.4 (6.5)	P=0.36

Comparison of post-workbook Knowledge Questionnaire scores in participant and comparison groups

	Participants N=135	Comparisons N=344	T-test p value
Biological score Mean (SD)	13.6 (3.4)	12.3 (3.3)	P=0.0003
Life skills score Mean (SD)	16.1 (4.3)	15.6 (4)	P=0.2
Overall score Mean (SD)	29.7 (7)	27.9 (6.5)	P=0.009

Comparison of pre-workbook and post-workbook Knowledge Questionnaire scores in participant group

	Pre-exposure N=137	Post-exposure N=135	T-test p value
Biological score Mean (SD)	12.5 (3)	13.6 (3.4)	P=0.004
Life skills score Mean (SD)	15.4 (3.9)	16.1 (4.3)	P=0.12
Overall score Mean (SD)	27.8 (6.4)	29 (8)	P=0.11

In the **participant group** there was an increase in the biological section mean score. There was no significant improvement in life skills section or overall score.

In the **comparison group** there was no difference in any of the mean scores on repeat Scoring.

Discussion

- HIV/AIDS related knowledge was fair in a Western Cape High School.
- Life skills knowledge was better than biological knowledge in all grades
- General HIV/AIDS knowledge increases with grade – suggesting current life skills programmes are having some effect
- The workbook improved biological knowledge in the participant group, but had no significant effect in overall scores

- We could not control for information ‘leak’
- We did not control life skills input for comparison classes
- Teachers were not trained in the use of the workbook as a teaching tool
- We did not assess other possible benefits:
 - Behavioural outcomes
 - Dissemination of information at home and community
 - Effects on HIV/AIDS related attitudes

Conclusions

- The *Extra Time* workbook may be a useful educational tool in school life skills programmes which
- It has been shown to have modest benefit in knowledge acquisition
- It is feasible for class teachers to use this workbook without additional training
- Results will be fed back to the Department of Education

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