

What Becomes of the Left Behind?

Survivors in AIDS-Afflicted Populations in Africa & Asia

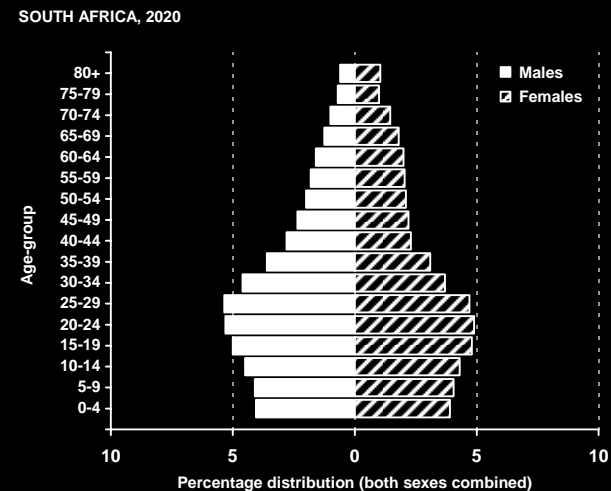
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Survivors in AIDS-Afflicted Populations in sub-Saharan Africa & Asia

Overview of Paper

- **Impact of HIV on demographic structure - “hourglass” or “chimney”?**
- **Characteristics of adult survivors**
- **Effects of HIV epidemics on children & older persons**
- **Case studies: Zimbabwe & Thailand**

Figure 1: Projected population structure of the Republic of South Africa, 2020



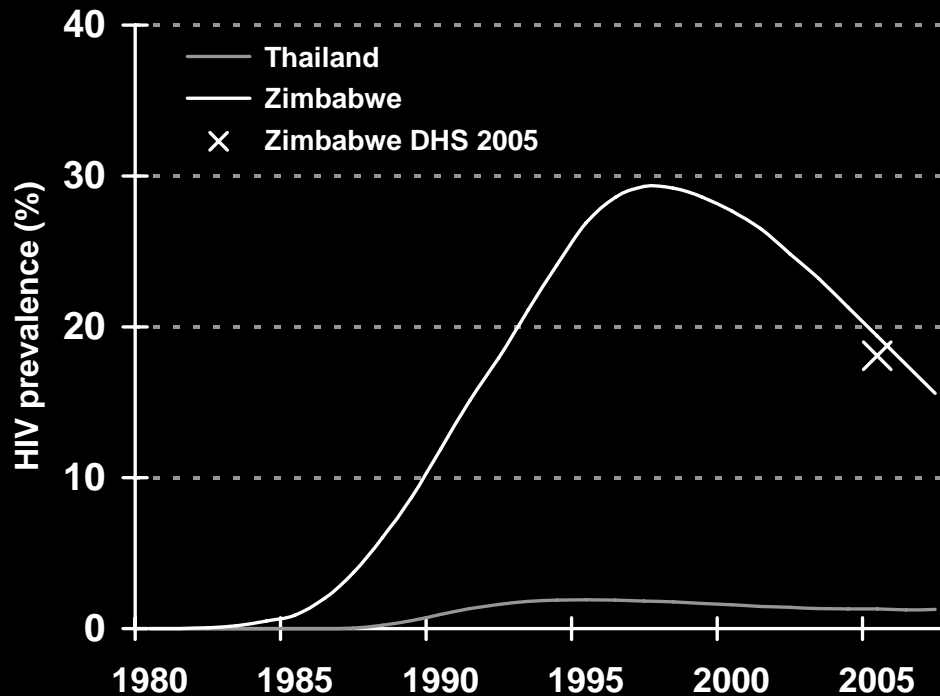
Source: Adapted from U.S. Census Bureau, 2004

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Impact of HIV epidemics on demographic structure

Trends in adult HIV prevalence in Zimbabwe & Thailand

Figure 2: National estimates of trends in HIV prevalence in adults aged 15-49 years, Zimbabwe and Thailand, 1980-2007



Impact on population growth:

Zimbabwe: 2.6% → 1.0%
Thailand: 1.1% → 1.0%

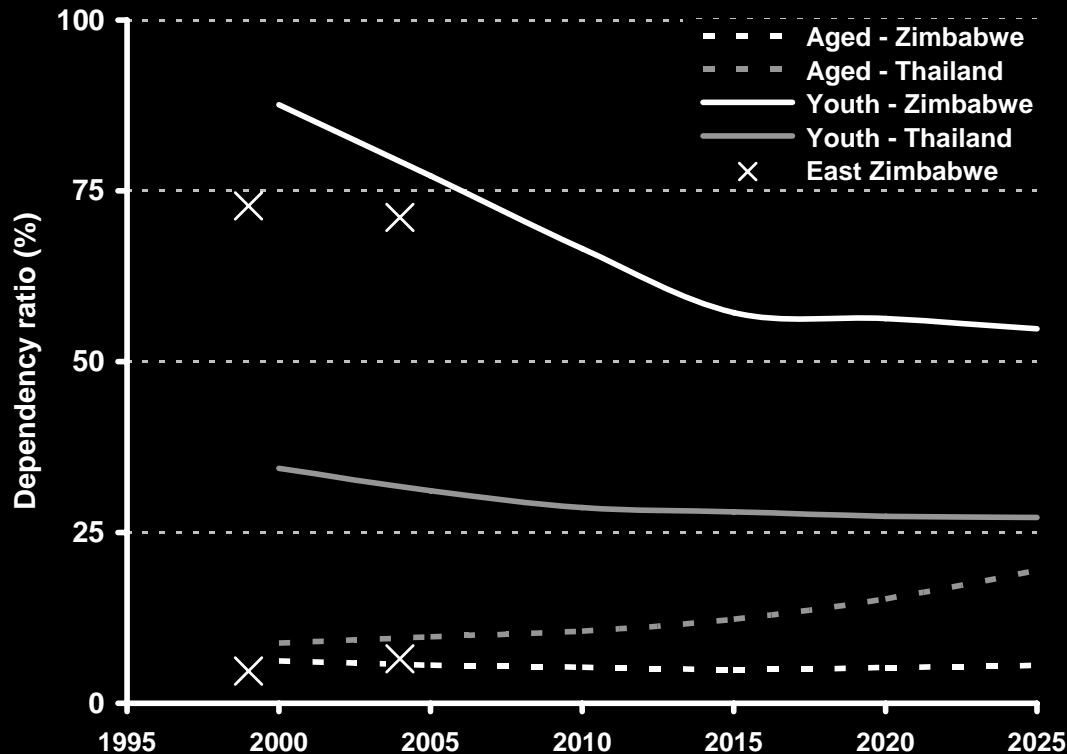
Sources: UNAIDS (2007) and Zimbabwe Central Statistics Office (2007)

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Impact of HIV epidemics on demographic structure

Trends in dependency ratios in Zimbabwe & Thailand

Figure 3: Estimates of aged and youth dependency ratios, Zimbabwe and Thailand, 1995-2025



Overall DR in rural Zimbabwe:
 1985 1.21
 2002 0.78

Adult sex ratio in rural Zimbabwe:
 1999 0.92
 2004 0.76

Trends dominated by fertility decline & migration

Source: Model estimates, World Bank, 2008; data for east Zimbabwe, Gregson et al., 2007

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Characteristics of survivors (selective survival)

- **Provider age-groups – younger & middle-aged adults**
 - Younger
 - Initially, more female; later, more male?
 - Initially, less educated/lower SES; later, more educated/higher SES?
 - Safer sexual behaviour – selective mortality & behaviour change
 - Lower fertility?
 - ART effects? Selective uptake – women (PMTCT), more educated ...?

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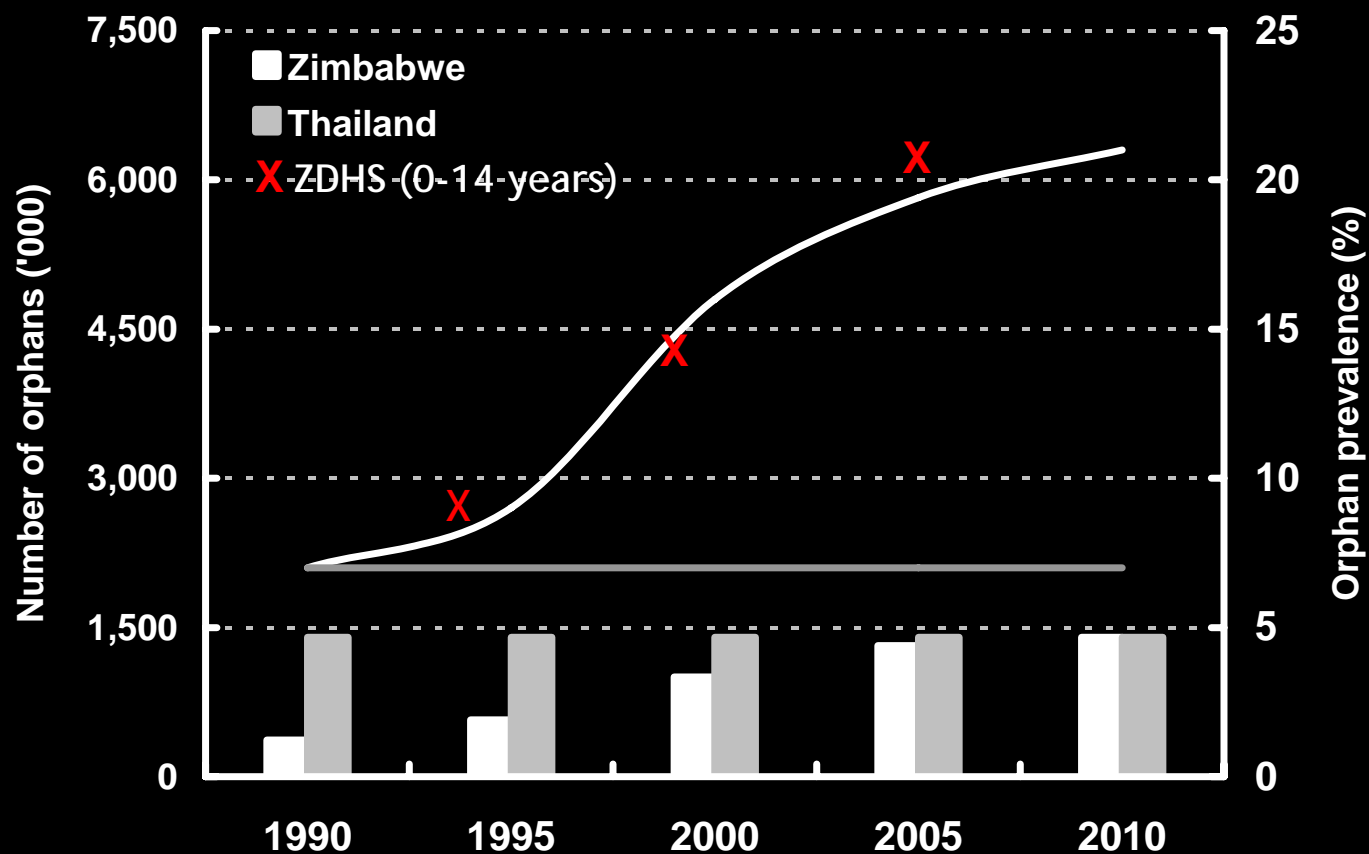
Characteristics of survivors (HIV prevalence)

	Zimbabwe	Thailand	
15-49s			
HIV prevalence	15.6%	1.3%	
Sex ratio of HIV infection (m/f)	0.69	1.5	
0-17s			
HIV prevalence (indirect estimates):			
0-1	4.4%	0.4%	} less PMTCT
1-4	3.2%	0.3%	
5-9	1.6%	0.1%	
HIV prevalence (Chimanimani):			
2-11 - orphans	5.6%		
2-11 - non-orphans	2.9%		
HIV prevalence (Manicaland):			
Males (17-18)	0.2%		
Females (15-18)	2.1%		
Females (15-18) - OVC	3.2%		
Females (15-18) - non-OVC	0.0%		
50+			
HIV prevalence (50-59):			
Males	20.6%		
Females	15.9%		
Fraction of all adult cases	5.8%	4.5%	

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Characteristics of survivors

Figure 4: Trends in orphanhood in children aged 0-17 years, Zimbabwe and Thailand

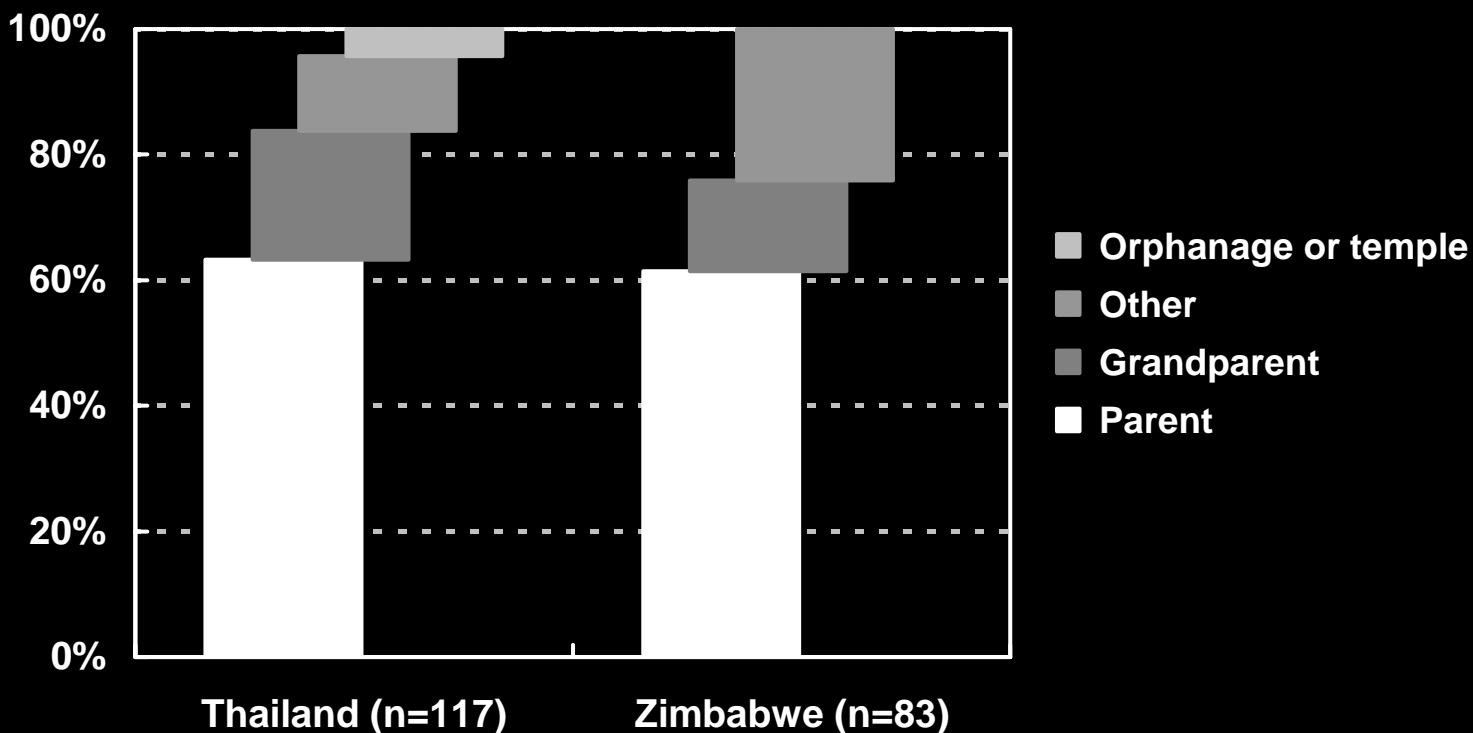


Source: Adapted from UNAIDS, UNICEF & USAID, 2004 and Zimbabwe Central Statistics Office, 2007

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Circumstances of survivors - orphans

Figure 5: Distribution of relationships of caregivers to orphaned children, Thailand and Zimbabwe



Source: Thailand, Pitayanon, 1997; Zimbabwe, Foster et al., 1995.

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Effects of HIV epidemics on survivors

DIMENSION OF WELL-BEING	CHILDREN		OLDER ADULTS	
ECONOMIC & EDUCATION	Group affected	Pathways	Group affected	Pathways
Reduced income & future income prospects	children with sick or deceased parents or caregivers	loss of household breadwinner; disruption & early cessation of education; loss of inheritance	adults with sick or deceased children	give up job to care for sick children; reduced business income due to stigma; loss of financial support in old age
			widow(er)s	give up job to care for sick spouse; loss of business income due to stigma; loss of household breadwinner
Reduced assets / increased debts	children with sick or deceased parents or caregivers	asset sales to finance healthcare & funeral costs	adults with sick or deceased children	asset sales to finance healthcare & funeral costs; {widows: loss of land & property on death of husband}
			widow(er)s	
EMOTIONAL & PSYCHOSOCIAL				
Psychological distress & mental illness	children with sick or deceased parents or caregivers	trauma & grief; stigma & discrimination; economic disadvantage (unmet basic needs); residence with less closely-related caregivers in unfamiliar surroundings; caregiving responsibilities; premature 'parenting' responsibilities; child labour & abuse	adults with sick or deceased infants	trauma & grief; fear of being infected; stigma & discrimination (anticipated & actual)
	children with sick or deceased siblings		adults with sick or deceased adult children	trauma & grief; fear of becoming infected; stigma & discrimination (anticipated & actual); increased caregiving responsibilities; anxiety over economic security
			widow(er)s	
Reduced & poorer quality socialisation	children with sick or deceased parents or caregivers	time taken away from social activities; avoidance of social contacts by others; strained family & social relationships; residence in children's homes or on the street	adults with sick or deceased children	time taken away from social activities; avoidance of social contacts by others; strained family & social relationships; residence in old people's homes
			widow(er)s	

Summary of theoretical frameworks developed by Foster & Williamson, Birdthistle, Nyamukapa & Knodel

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Effects of HIV epidemics on survivors

HEALTH & NUTRITION		Group affected	Pathways	Group affected	Pathways
Increased exposure to health hazards	children with sick or deceased parents or caregivers	mother-to-child-transmission of HIV; weak supervision & support; caregiving responsibilities / inadequate skills; poor diet; opportunistic infections (e.g. TB); poor mental health; substance abuse; socio-economic pressures towards early & high-risk sex for STDs & HIV; unstable unprotected sexual relationships	adults with sick or deceased children	physical effort required by caregiving & additional income-generating activities; poor diet; opportunistic infections (e.g. TB); weak family & social support; poor mental health; substance abuse; unstable unprotected sexual relationships {widow(er)s: remarriage}	
			widow(er)s		
Poorer access to health services	children with sick or deceased parents or caregivers	weak supervision & support; poverty; lack of birth registration & identification; low literacy & education; absence of inter-generational skills; poorer mental health	adults with sick or deceased children	stigma, poverty, poor mental health & social isolation leading to reduced mobility & access to services	
			widow(er)s		

Summary of theoretical frameworks developed by Foster & Williamson, Birdthistle, Nyamukapa & Knodel

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Effects of HIV epidemics on survivors – orphans in Zimbabwe

DIMENSION OF WELL-BEING	ORPHANS		NON-ORPHANS		TEST FOR DIFFERENCE	
	%	N	%	N	AOR	P
Economic & Education						
Does not own a pair of shoes (5-17 year-olds)	58	8,333	42	13,413	1.90	<i><0.001</i>
Not attending school (6-12 year-olds)	31	5,014	24	8,363	1.49	<i><0.001</i>
Not attending school (13-17 year-olds)	45	2,951	37	3,787	1.41	<i><0.001</i>
Emotional & Psychosocial						
Psychosocial distress (paternal orphans, 12-17 year-olds)	-	1,123	-	2,165	0.13 †	<i><0.001</i>
Psychosocial distress (maternal orphans, 12-17 year-olds)	-	281	-	2,165	0.22 †	<i><0.001</i>
Psychosocial distress (double orphans, 12-17 year-olds)	-	548	-	2,165	0.25 †	<i><0.001</i>
Health & Nutrition						
<i>Exposure to health hazards</i>						
Malnutrition - stunting (0-4 year-olds)	34	826	28	4,891	1.29	<i>0.001</i>
Diarrhoea in last 2w (0-4 year-olds)	15	947	17	6,109	0.98	<i>0.81</i>
ARI in last 2w (0-4 year-olds)	6	1,027	7	6,463	0.86	<i>0.31</i>
Commenced sexual activity (12-17 year-olds)	12	2,206	9	2,910	1.25	<i>0.06</i>
<i>Access to health services</i>						
Birth not registered (0-4 year-olds)	60	1,075	61	6,699	1.11	<i>0.13</i>
Not up-to-date with vaccinations (0-4 year-olds)	47	139	44	1,222	1.13	<i>0.48</i>
No vitamin A suppl'n in last 6m (0-4 year-olds)	64	876	63	5,309	1.06	<i>0.43</i>

AOR, Mantel-Hanzel odds ratio adjusted for age and sex

† Age and sex adjusted co-efficient from ordinary least squares regression comparing OVC to non-OVC

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Discussion

- Fertility decline - more than HIV/AIDS mortality – has been the key factor in shaping population structures even in the worst affected populations
- Selection effects of AIDS mortality are not clear-cut & may be changing over the course of epidemics
- Major HIV/AIDS epidemics have brought about substantial increases in orphanhood & in demands on older persons
- Effects of orphanhood on children are inconsistent & may vary by socio-economic / cultural context, size & stage of HIV epidemic, etc.
- Effects of HIV/AIDS epidemics on older persons are under-researched & poorly understood outside south-east Asia (Knodel)