





# **The Sydney Ageing and Holocaust Study**



**Charmaine Joffe  
Henry Brodaty  
Georgina Luscombe**



# Australian context

- 1788 Jews on First Fleet
- 1837 First synagogue
- 1920 Eastern European (Polish)  
Jews flee pogroms
- 1930s ~ 8000 Jews, mainly German &  
Austrian, flee Nazis to  
Australia

# Australian context II

- 1945+ ~ 35,000 European Jews resettled
- 1956+ Hungarian uprising
- 1970+ South Africa isolated
- 1970+/1990+ Russian perestroika

# Jewish population in Australia<sup>1</sup>



- About 100,000
- Concentrated in Sydney & Melbourne
- Older, ~ 1/3  $\geq$  60 y.o.
- 84% born overseas (more in elderly)
- F > M, especially in aged

<sup>1</sup>Goldlust, 1993

# Reasons for re-emergence of Holocaust memories

- Reunification of Germany
- Further German and Swiss restitution
- Establishment of Jewish Holocaust museums
- Films: *Schindler's List*, *Shoah*, *Life is Beautiful*
- War crime trials

# More reasons for re-emergence of Holocaust memories

- Other 'holocausts', e.g. Rwanda, Cambodia, Kosovo, East Timor
- Genocidal activities
- Revisionism, Holocaust deniers, e.g. David Irving
- Grandchildren
- Need to testify
- Effects of ageing

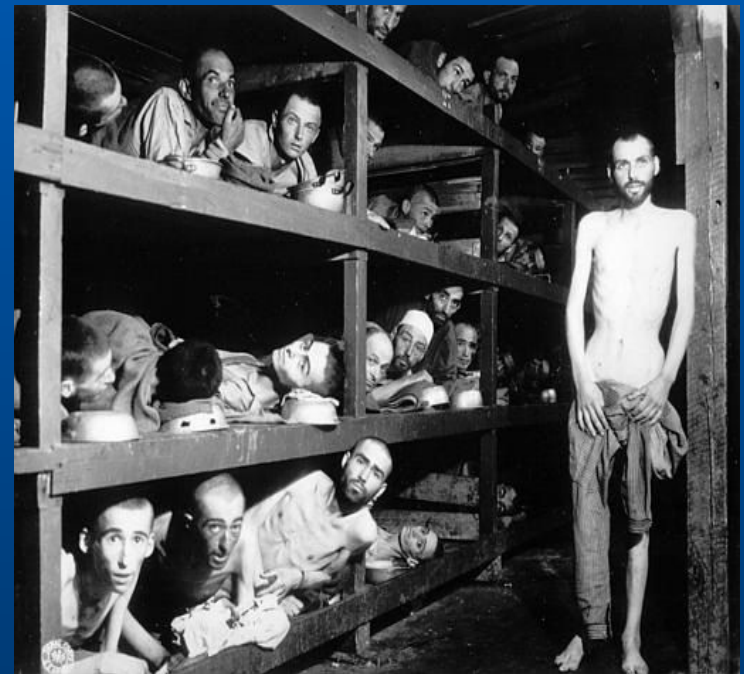
# The Jewish Holocaust



- Systematic, organised destruction of an entire people
- Two thirds of European Jews killed
- ▽  $\approx$  6 million killed of 8.86 million living in Europe before the war

# Definition of a Holocaust survivor

1. Imprisoned in a concentration camp for  $\geq 6$  months<sup>1</sup>
2. In a ghetto for  $\geq 18$  months<sup>1</sup>
3. Hiding under severe conditions for  $\geq 18$  m<sup>1</sup>
4. False papers posing as Aryans for  $\geq 2$  yrs
5. Forced labour camps for  $\geq 1$  yr



<sup>1</sup>Claims Conference, Article 2 Fund, 1992

•  
•  
•

# **Long-term psychological effects of Holocaust survival<sup>1-3</sup>**

- **Severe psychosomatic reactions**
- **Depression, flatness of affect**
- **Sexual dysfunction**
- **Phobic states**
- **Guilt, obsessive rumination**
- **“Universal breakdown”**

<sup>1</sup>Friedman, 1949; <sup>2</sup>Eitinger, 1964, <sup>3</sup>Matussek, 1961

•  
•  
•  
•  
•  
•  
•  
•

# Universal breakdown:

*Does anyone escape the aftermath?*

**“If one rides a bicycle over a flower bed, some of the flowers will be broken, others not; but if one drives a heavy bulldozer with caterpillar wheels over the same flower bed, there is little likelihood of any of the flowers recovering”  
Eitinger, 1964**



# Concentration camp survival syndrome in psychiatric patients

- Concentration camp survivors -vs - Russian emigrés who had psychiatric hospitalisation<sup>1</sup>
- Social withdrawal
- Psychosomatic illness
- Obsessive ruminations about the past
- Difficulties in functioning in everyday life

<sup>1</sup>Nathan et al (1964)

# Other studies

- Hocking 1965
- Tuteur 1966
- Winnik 1967
- Otswald & Bittner 1968
- Strom 1968
- Niederland 1968
- Krystal & Niederland 1968
- Eitinger 1969
- Chodoff 1969
- Matussek 1975
- Dor-Shav 1978

# Other studies

- Cordell 1980
- Grubrich-Smiths 1981
- Eaton et al 1982
- Levav & Abramson 1984
- Carmil & Carol 1986
- Nadler & Ben-Shushan 1989
- Kahana et al, 1988
- Harel et al, 1988
- Robinson et al, 1990
- Silow 1993
- Bower 1994
- Yehuda et al, 1995;1997
- Favaro et al 1999

# Non-Jewish Holocaust Survivors

- *Norway*, Eitinger 1961, 1969
- *Italy* Favaro et al, 1999
- Concentration camp survivors
  - PTSD 35.3% (lifetime)
  - 25.5% (current)
- Partisans PTSD 4.3% (life & current)

# Summary of findings

- Symptoms common, e.g.
  - depression
  - sleep disturbances, nightmares
  - recurrent intrusive thoughts
  - somatic symptoms
- Persistence of symptoms over 50 years
- Reasonable function but at cost
- Some studies - “scarring” but well adapted



# Predictors of symptoms

- **Severity of trauma**
- **Cumulative trauma**
- **Recent stress**
- **Younger age at time of trauma**
- **Women**

# Studies with positive and negative findings

- Antonovsky et al 1971
  - a minority of survivors were well adapted
- Leon et al, 1981
  - no serious impairment
  - survivors able to overcome symptoms and difficulties
- Shanan & Shahor 1983
  - few differences compared to controls

# Studies with positive and negative findings

- Kahana et al 1988
  - survivors scarred but.....
  - large % are well adjusted individuals who have become successful and productive

# Pitfalls from studies

- Survivors not sampled from community
- Clinic samples
- Compensation claimants
- Lack of standardised criteria
- Lack of comparison groups
- Lack of randomised sampling

# Why this study?

- No systematic study of Australian survivors to date
- Sydney has 2nd highest per capita Jewish HS population in world
- Population is elderly
- Better methodology, eg community sample, standardised instruments

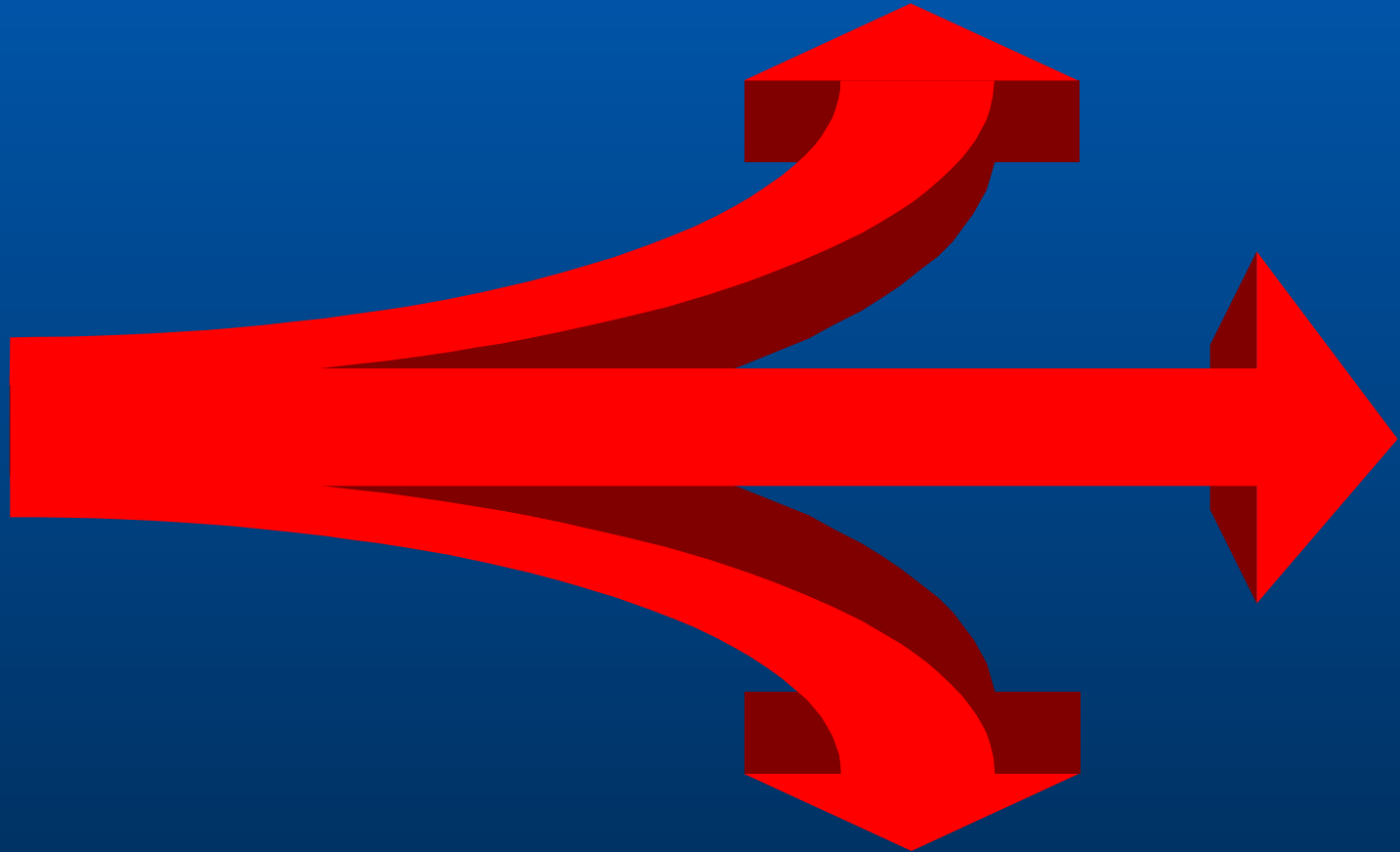


**What are the effects of  
ageing on Holocaust  
survivors?**

**What are predictors of  
outcome?**



What are the effects of ageing  
on Holocaust survivors?  
Better, same or worse?



# Two theories about the effects of age on survivors

- *Inoculation theory*
  - “immunised against stress of ageing”
- *Vulnerability theory*
  - more prone to ill effects of ageing

# Ageing & Holocaust

- **Kahana et al 1988, 1989, 1992**
  - **psychological symptoms**
  - **physical symptoms**
  - **45% said that Holocaust made it more difficult for them to cope**
  - **26% said that the Holocaust made it easier for them to cope**

# Aims

1. Examine late life sequelae of being a survivor
2. Among survivors, determine which factors are associated with poor psychological health & Post-Traumatic Stress Disorder (PTSD)

Joffe C, Brodaty H, Luscombe G, Ehrlich F.  
*Journal of Traumatic Stress*, 2003;16:39-47.

# The sample

- 2639 older Jewish persons
- 9 Sydney communal organisations
- 814 responses stratified
  - 309 Holocaust survivors (HS)
  - 127 Refugees (REF)
  - 210 Australian/English born (AEB)
  - 168 ineligible

•  
•  
•

# Three randomly selected (computer generated) sub-samples

- 100 **survivors** → 94% accepted interview (**HS**)
  - predominantly Eastern European
- 50 **refugees** → 91 % accepted interview (**REF**)
  - predominantly German pre-war migrants
- 50 **Australian/English born** → 90% (**AEB**)
- Replacements randomly chosen for those not accepting interview

# Assessment tools

- Self-rated health
- GHQ-28
- BPRS
- Impact of Event Scale
- DSM-IV PTSD
- Somatic Symptoms Questionnaire
- IADL
- MMSE
- Life Satisfaction
- Sleep, alcohol, medication
- Past Psychiatric History
- Social, family involvement
- EPI
- Defense Style Questionnaire

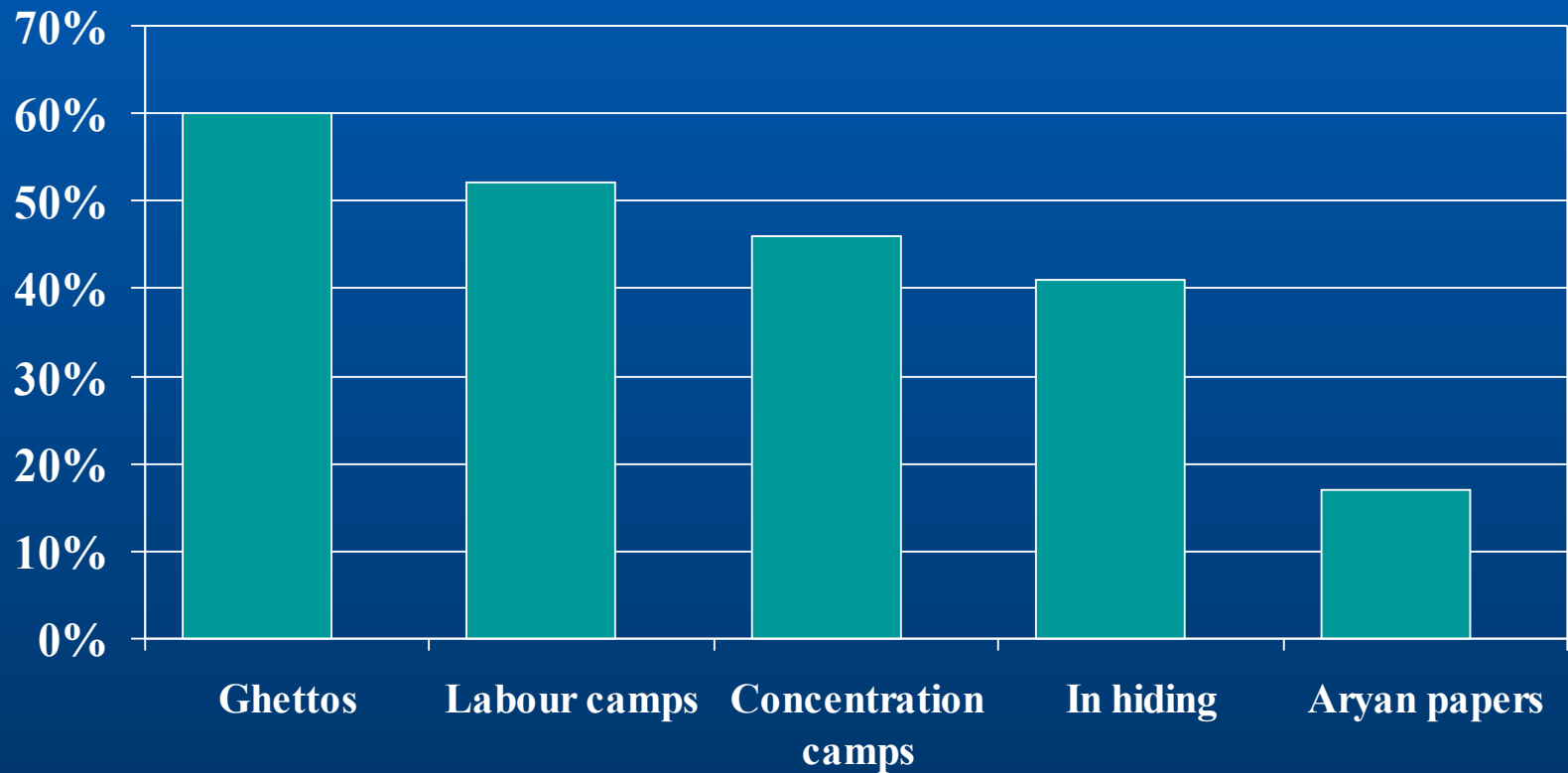
# Demographics of the groups

- Three groups similar as regards:
  - age (~ 75 yo)
  - gender (~ 60% female)
  - marital status (~ 43% partner)
  - widowhood (~50%)
  - education
  - religiosity
  - living arrangements (~ 55% alone)

# Mother tongue

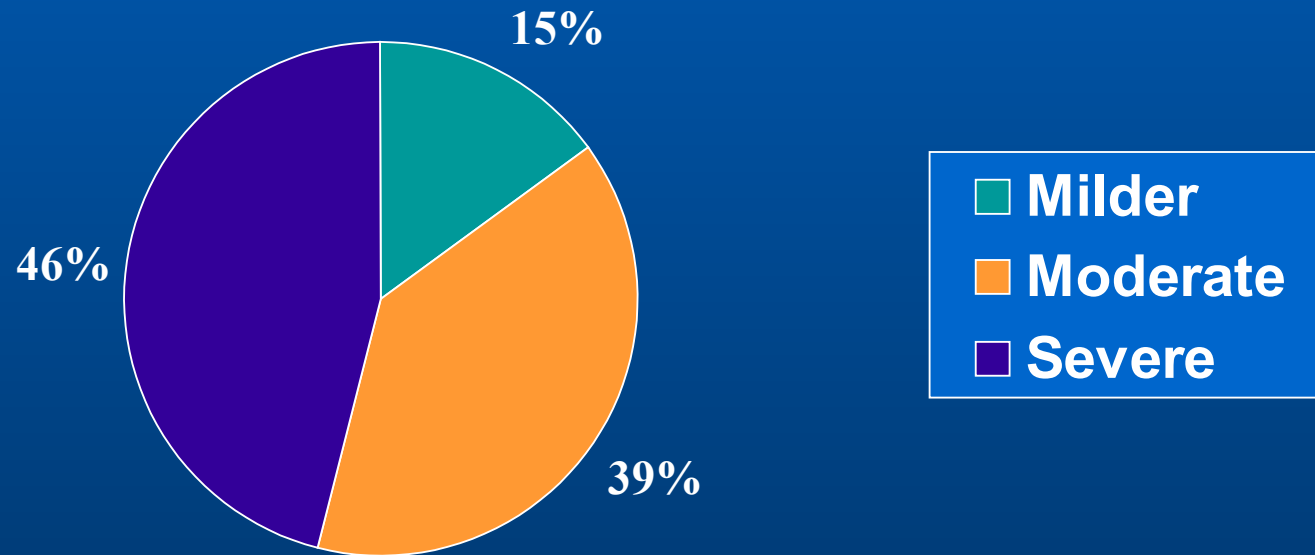
	HS	REF	AEB
Hungarian	33%	2%	
German	14%	80%	
Yiddish	14%	8%	
Polish	9%	6%	
Dutch	6%		
Russian	6%		
English	1%	2%	98%

# Types of persecution of HS

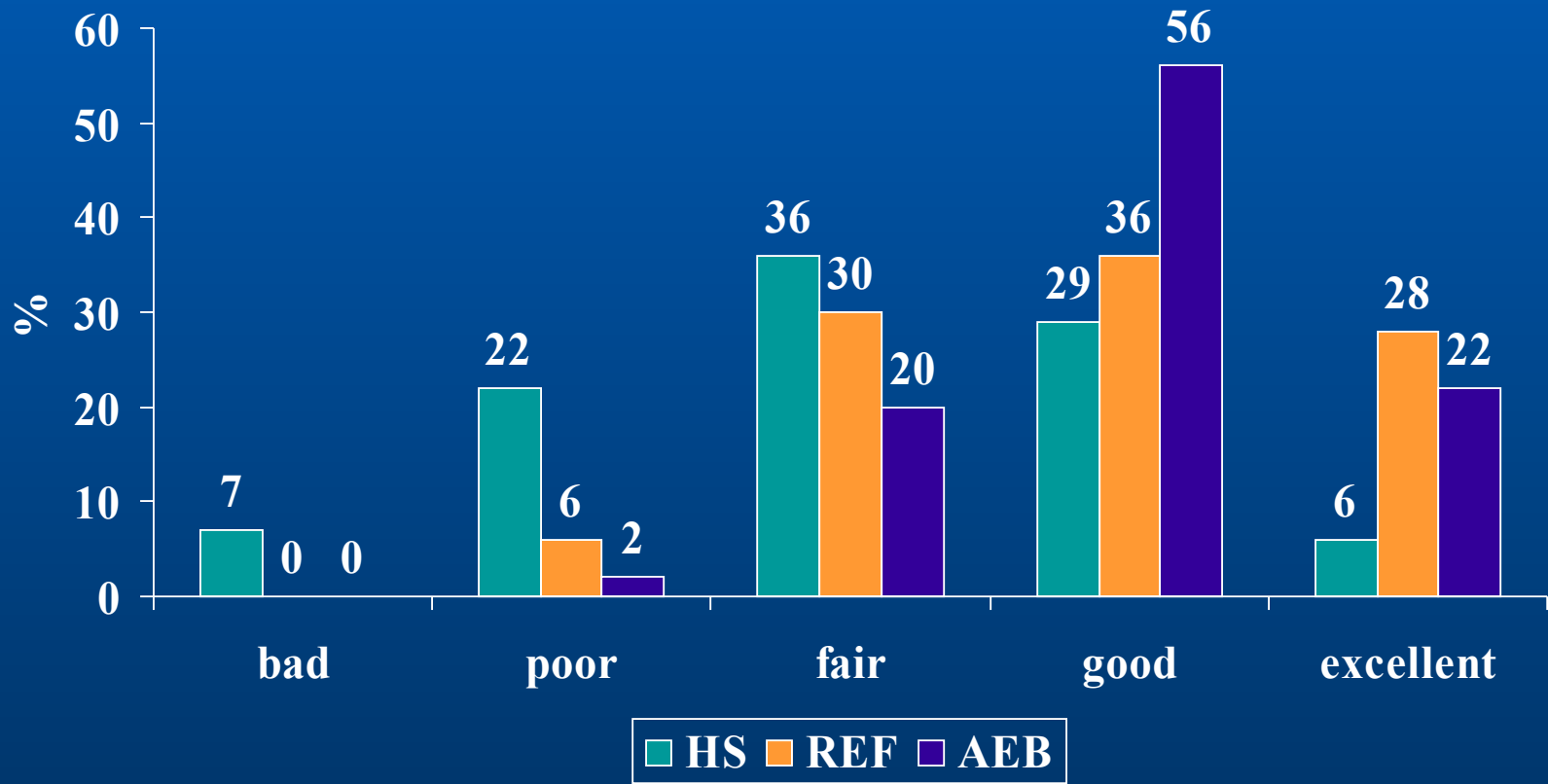


**Survivors could experience more than one type of persecution:**

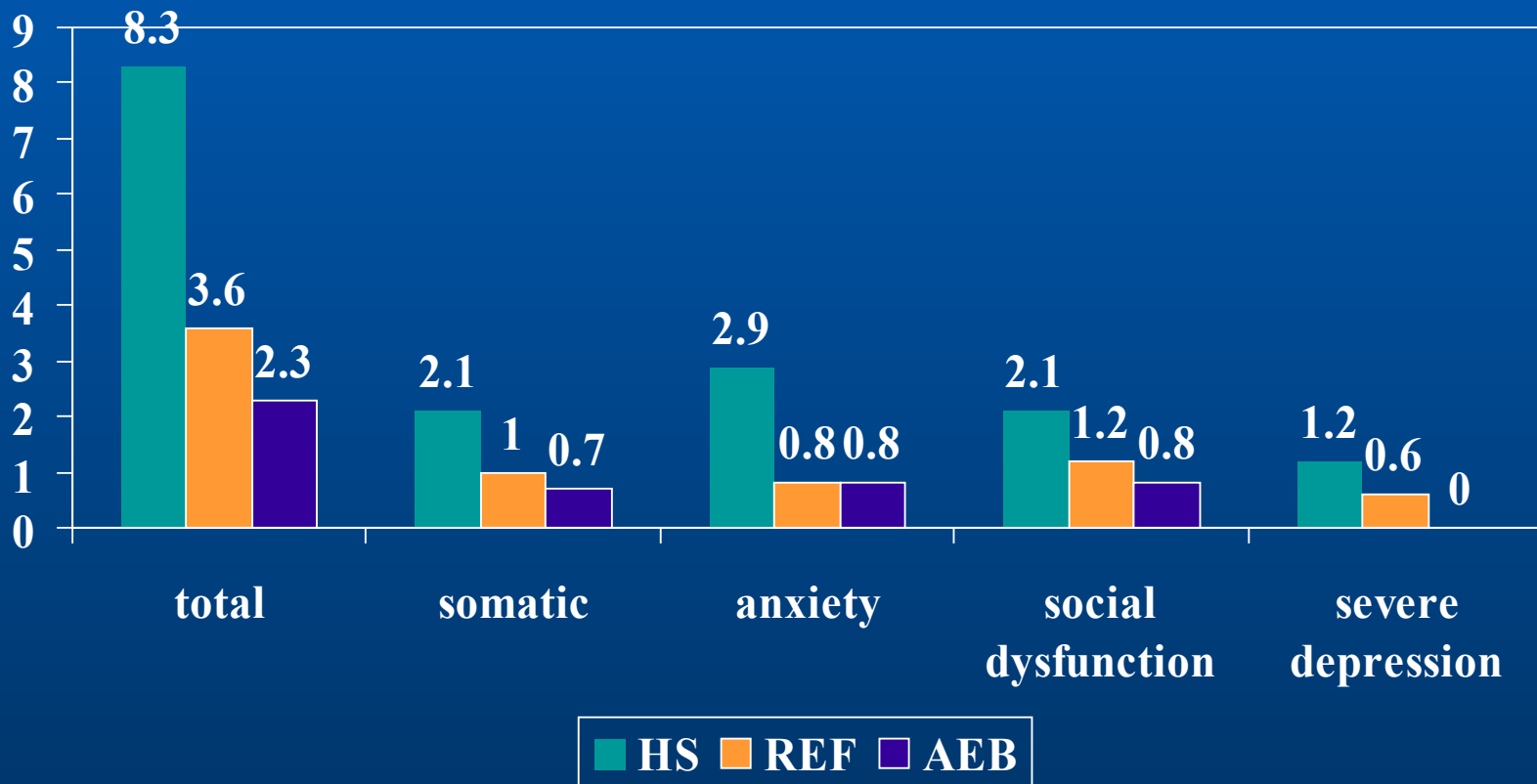
# Severity of persecution



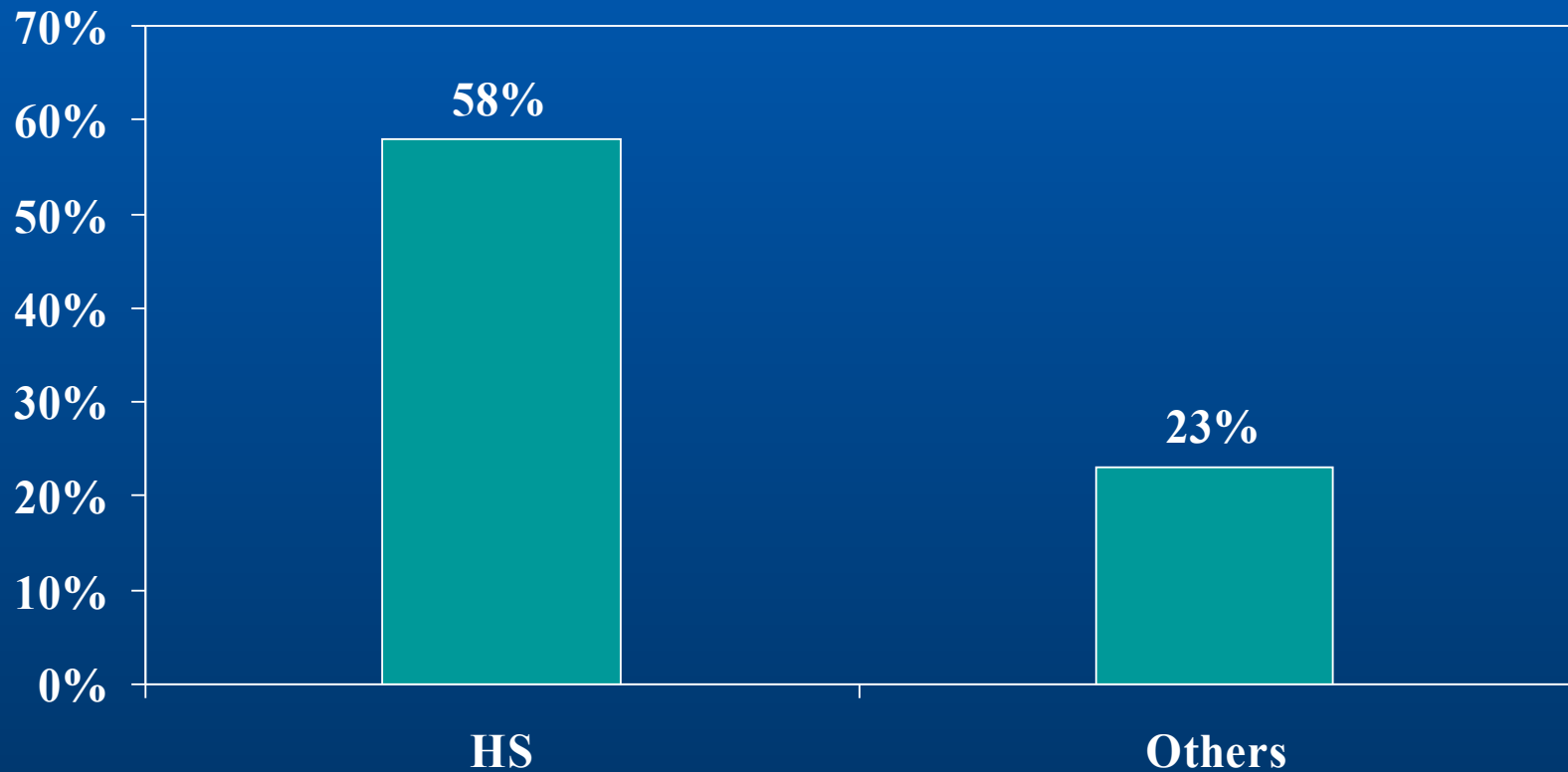
# Self-rated psychological health



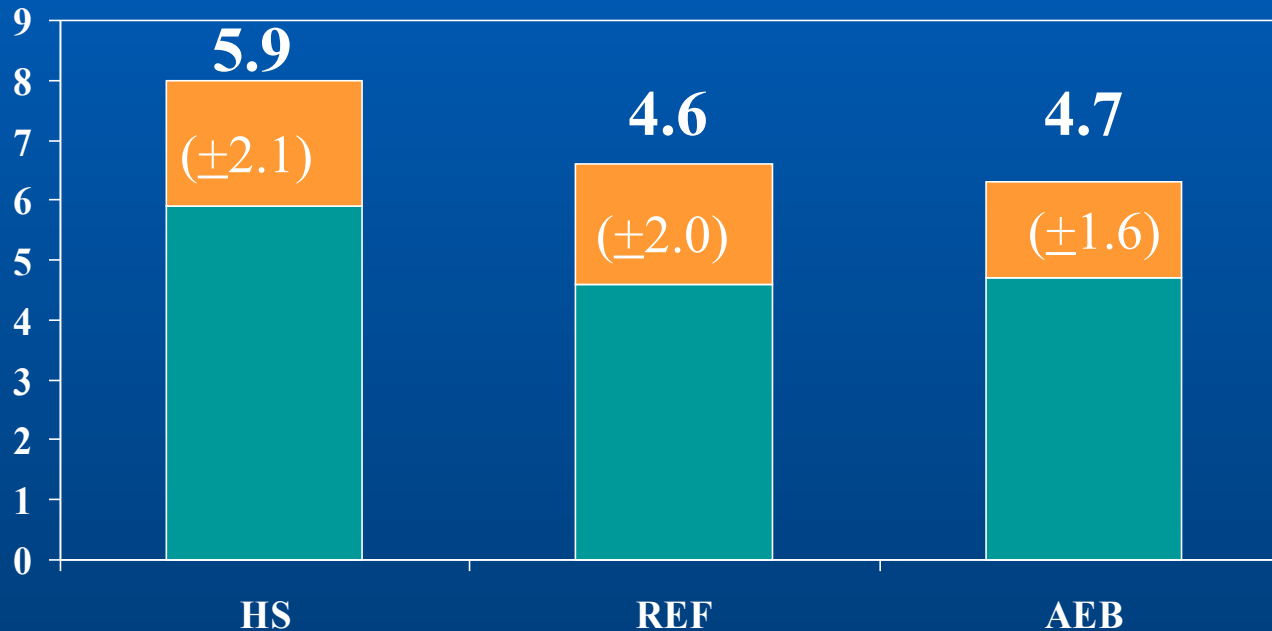
# General Health Questionnaire total and sub-scale scores



# GHQ - 28 Score $\geq 5$



# Medications in general



- HS take significantly more sleeping tablets
- HS take take more sedatives
- HS tend to take more antidepressants

# Somatic symptoms: HS more

- Headaches (p = .007)
- Dizziness (p < .001)
- Backaches (p = .007)
- Muscle weakness (p < .001)
- Exhaustion (p < .001)
- Stomach pain (p = .02)

# Post-traumatic Stress Disorder

- A) Traumatic event: experience + fear/horror
- B) Re-experience event persistently in  $\geq 1$  of:
  - 1) recurrent, intrusive distressing recollections
  - 2) recurrent distressing dreams of event
  - 3) acting or feeling as if event were recurring, e.g. sense of reliving event, hallucinations, flashbacks
  - 4) intense distress if exposed to cues that symbolise or resemble the event
  - 5) Physiological reactivity with cue

# **PTSD - (C) Persistent avoidance of associated stimuli and numbing of general responsiveness, $\geq 3$ :**

- 1) avoid thoughts, feelings or talk about trauma**
- 2) avoid activities, places or people that arouse recollections of the trauma**
- 3) unable to recall an important aspect of trauma**
- 4) markedly decreased interest or participation**
- 5) feeling of detachment or estrangement**
- 6) restricted range of affect**
- 7) sense of foreshortened future**

⋮  
**PTSD - (D) Persistent symptoms  
of increased arousal,  $\geq 2$  of:**

- 1) Difficulty falling asleep
- 2) Irritability or outbursts of anger
- 3) Difficulty concentrating
- 4) Hypervigilance
- 5) Exaggerated startle response

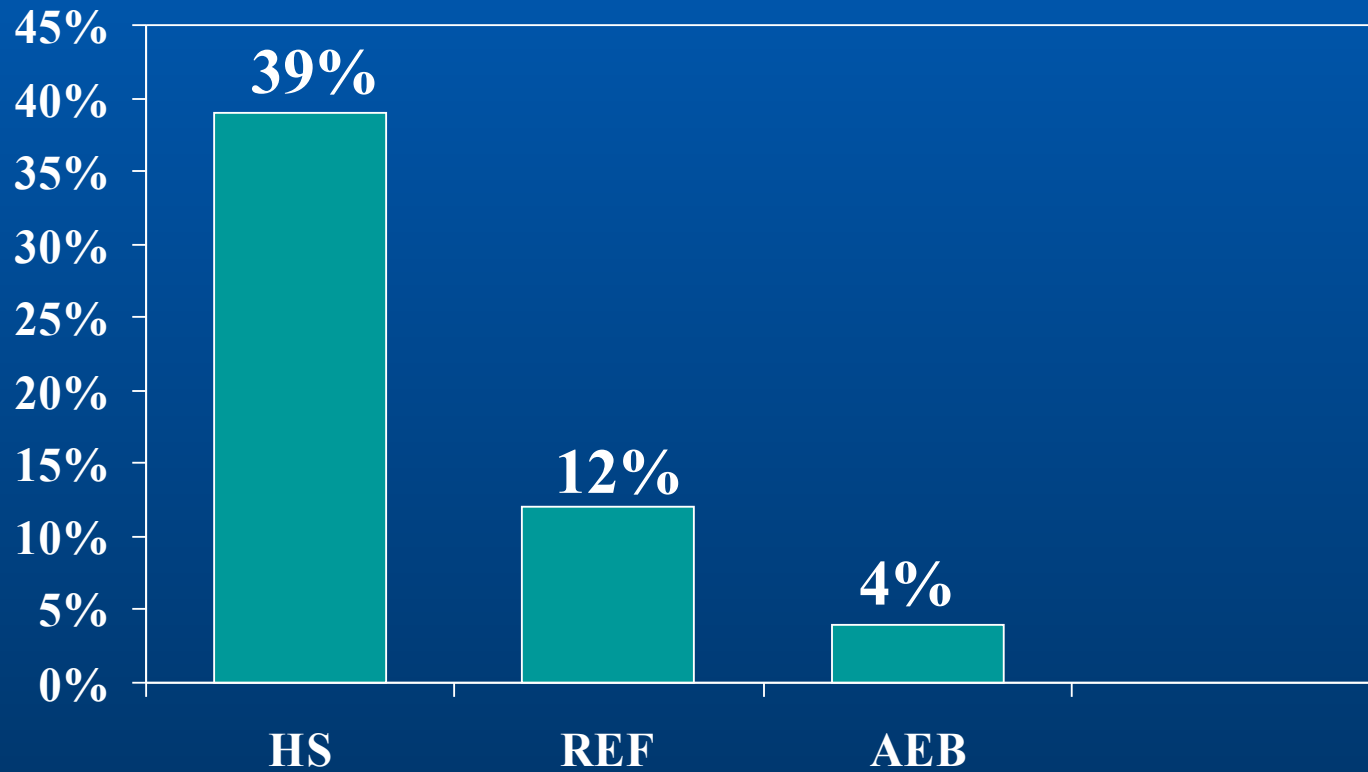
# PTSD Criteria E & F

**E) Duration of disturbance (symptoms in B, C & D) is more than one month**

**F) Disturbance causes clinically significant distress or impairment in social, occupational or other important areas of function**

***Specify if chronic = symptoms  $\geq$  3 months***

# Post Traumatic Stress Disorder



N° criteria: 4.2

2.4

0.5

## **Past psychiatric history and treatment**

- **Trouble with nerves or depression**  
**HS 67% -vs - REF 38% -vs - AEB 32%**
- **No difference between groups in %  
seeking treatment**

# **Social & family interaction**

**Survivors, compared to others:**

- **same frequency of social interaction**
- **less satisfaction with social interaction**
- **equally happy with contact with their children**
- **more often felt they should be able to depend on their adult children**

# • • • **HS worst on other outcomes:**

- **Self-rated physical health**
- **Brief Psychiatric Rating Scale (BPRS)**
- **Number of medications**
- **Somatic symptoms**
- **Poor sleep, nightmares**
- **Past trouble with nerves or depression**
- **Satisfaction with social interaction**

# Groups similar

- Daily function (IADL)
- Alcohol (very little)
- Frequency of social interaction
- Satisfaction with family life (but not with friendships, health, finances)
- Equally happy with contact with their children

# Sleep

	<b>HS</b>	<b>Others</b>
Sufficient sleep	25%	63%
Sedatives		
- nightly	56%	23%
- never	14%	49%
Disturbing nightmares		
- never/rare	30%	91%
- often/always	26%	2%

# Personality and HS

- HS score higher on EPI - Neuroticism
- HS more likely to use more immature defenses e.g. projection, denial, splitting
- HS less likely to use mature defenses

# Severity of persecution

**Mild** (15%): in hiding, anonymous, countryside, Aryan papers and able to move freely

**Moderate** (39%): not in death camps, able to forage for food, in ghettos and labour camps

**Severe** (46%): concentration and death camps, in constant danger, hidden in inhumane conditions without food, light.



# Persecution severity associations

- **Impact of Events Scale score**
  - intrusion and avoidance sub-scale scores
- **Number of PTSD criteria met**  
(mild 2.8, moderate 4.0, severe 4.9)
- **Percentage meeting criteria for PTSD**  
(mild 13%, moderate 23%, severe 61%)
- **Number of medications in general**
- **Number of antidepressants and anxiolytics**

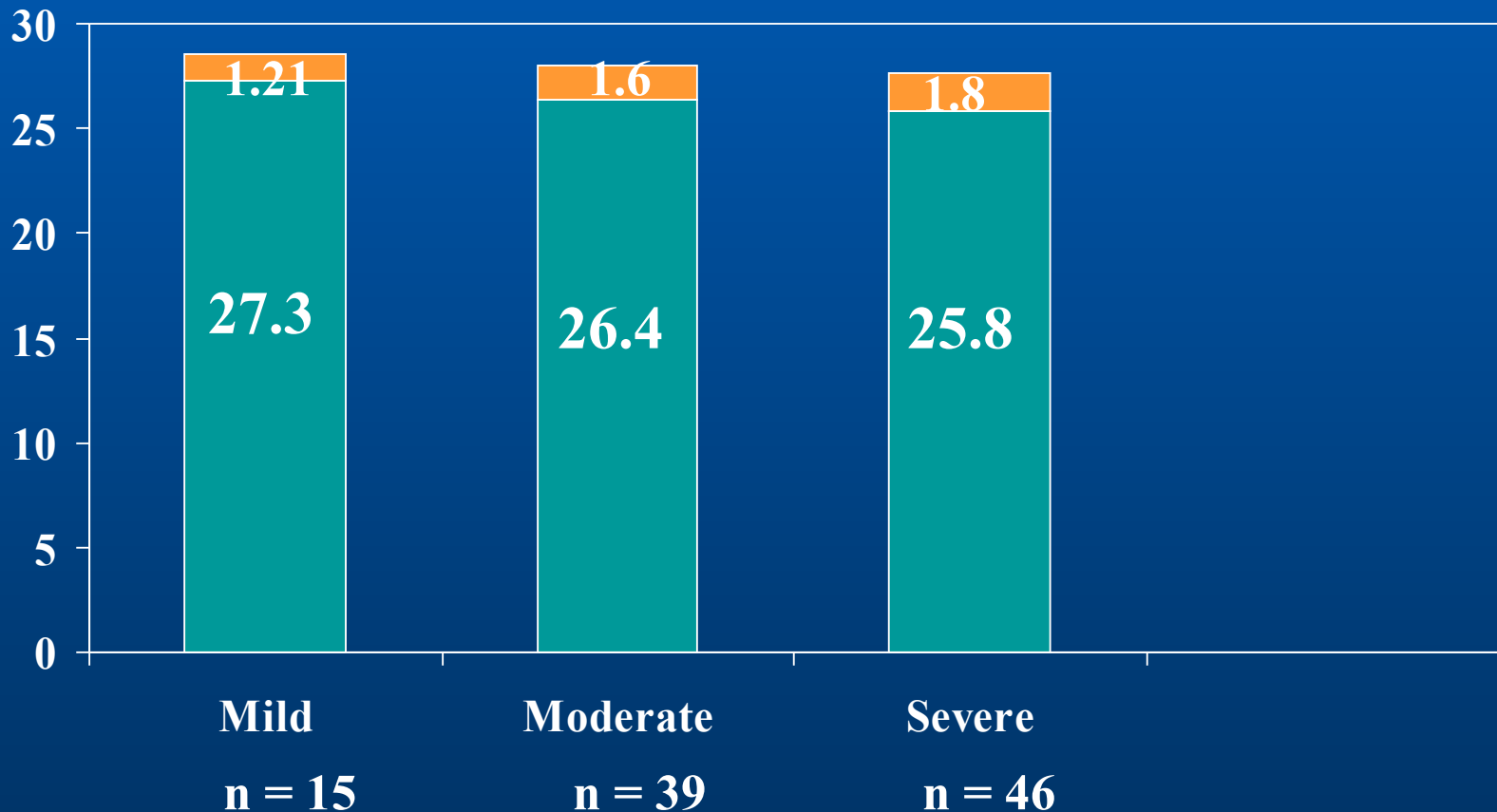
# Persecution severity associations

- GHQ score
  - anxiety
  - social dysfunction
  - (severe depression)
- BPRS
  - withdrawn, depressed and (agitated)
- Lower MMSE



Mild = 27.3, Mod = 26.4, Severe = 25.8

# MMSE x severity of persecution



•  
•  
•

# HS: 39 PTSD -v- 61 non-cases

- PTSD > severe persecution
    - lower MMSE
    - poorer IADL
    - higher GHQ
  - Similar demographics
- •  
•  
•  
•  
•  
•  
•

•  
• **39 Holocaust PTSD cases more likely than 61 non cases to:**

- **Be older ( $75.6 \pm 5.5$  vs  $72.1 \pm 7.0$ )**
- **Have experienced more severe trauma**
- **Use immature defenses**
- **Score lower on MMSE ( $24.9 \pm 1.5$  vs  $27.1 \pm 1.3$ )**
- **Score lower on IADL ( $1.2 \pm 0.3$  vs  $1.1 \pm 0.1$ )**

**Brodaty H, Joffe C, Luscombe G. *International Journal of Geriatric Psychiatry*, 2004;19:968-979**

• • • • • • • • • •

# Vulnerability to PTSD

## *Significant*

- Older age
- More severe trauma
- Immature defense mechanisms
- Higher N score

## *Non-significant*

- Gender
- Marital status
- Living arrangements

# Comments on findings

## *Results of GHQ analyses*

- Similar to PTSD associations

## *Why are older HSs > vulnerable?*

- Have effects of ageing overpowered effects of youthful vulnerability
- Association of functional and cognitive vulnerability with PTSD (and GHQ)

*First study to demonstrate association with personality/ defense: direction of causality?*

## HS 58 GHQ cases vs 42 non cases

- Older, living alone
- Not married currently
- More severe trauma
- Lower MMSE and IADL
- Higher scores on Impact of Events Scale
- PTSD diagnosis
  - 67% of GHQ cases had PTSD
  - No survivor with GHQ < 5 had PTSD



# Profile of psychologically unwell HS

- Older woman, living alone
- Experienced severe trauma during war
- Sleeping poorly, nightmares
- Taking more medications



# Conclusions I: After 50 years...

- In a non-clinical sample traumatic effects still evident on PTSD and all psychological measures
- Even so, survivors are functioning well socially and occupationally but at a cost
  - psychological morbidity
  - sleep disturbances, nightmares
  - more anxiolytics, hypnotics

# After 50 years....Conclusions II

- The severer the trauma the worse the consequences
- PTSD more likely in those who have
  - have had more severe trauma
  - are more “neurotic”
  - use more immature defense mechanisms
  - have (slightly) poorer cognitive function

# Conclusions III

- **Stress inoculation hypothesis not supported**
- **Vulnerability hypothesis more likely**
- **Need to do longitudinal research to examine changes in psychological effects**

# The future

- Health professionals should be aware of high rates of PTSD and its chronicity
- Appropriate treatment and assistance
- Transgenerational effects on children and further generations
- Lessons for other holocausts
  - Cambodia, Congo, East Timor
  - Bosnia/Serbia/Kosovo

# The future

- **Appropriate treatment and assistance**  
**Research into best ways to help, eg**  
**Survivors' Club, Psychotherapy**
- **Transgenerational trauma: effects on**  
**children and further generations**

•  
• [www.med.unsw.edu.au/adfoap](http://www.med.unsw.edu.au/adfoap)  
•  
•

• Joffe et al *J Traumatic Stress*, 2003;16:39-47  
•

• Brodaty et al *IJGP*, 2004;19:968-979  
•  
•  
•

**The end**



**Thanks to to the people who participated; the organisations that distributed questionnaires; the Henry Roth Foundation and Aristocrat Leisure for their support, and Alisa Green for assistance with the presentation.**

