IUSSP Scientific Panel on
"Health Equity and Policies in the Arab World"

Report
IUSSP International Seminar
On

Health Inequity:
Current Knowledge and New Measurement Approaches

Cairo, Egypt. February 16-18, 2008.

International Seminar Health Inequity: Current Knowledge and New Measurement Approaches

Cairo, Egypt

16-18 February 2008

Organized by the IUSSP Scientific Panel on Health Equity and Policies in the Arab World and the Social Research Center of the American University in Cairo.

Supported by the Wellcome Trust, the Dutch Ministry of Foreign Affairs, and UNFPA

Seminar report

Introduction

The IUSSP Scientific Panel on Health Equity and Policies in the Arab World in collaboration with the Social Research Center of the American University in Cairo held a seminar entitled "Health Inequity: Current Knowledge and New Measurement Approaches" from 16 to 18 February 2008. The seminar was funded by the IUSSP, the Wellcome Trust, the Dutch Ministry of Foreign Affairs and WHO regional office (EMRO). The seminar aimed to achieve three main objectives: a) initiate and facilitate a dialogue and collaboration among regional and international scholars, researchers and practitioners working in the area of health inequity, b) expand the knowledge base on causes and consequences of health inequities, and c) develop and evaluate new approaches and methodologies in the area of health inequities.

The seminar was attended by 36 participants. Participants were from various backgrounds including demographers, sociologists, health professionals and public health academics. A total of 21 papers were presented. The papers covered a wide array of health inequity issues that explored areas such as conceptualization issues, measurement approaches and determinants, and case studies of health inequity in reproductive and maternal health and child health.

The following is a brief review of the seminar's main themes and sessions.

Theme I: Conceptualizing health inequity

This theme provided an overview of health inequity issues, defining the term and tracing the movement to investigate health inequity and its underlying causes. The opening presentation emphasized the need for Arab scholars to engage more in the development of policy oriented research activities in the area of health inequity. Scholars also need to move beyond investigating determinants of health to identify both proximal and distal determinants of health inequity and expand the definition of social groups to include new dimensions of social stratification. Papers presented in this session argued for the significance and the importance of incorporating various dimensions of social structure and cultural context in any research on health inequity, emphasizing that all research should be conducted from a human rights perspective (Nayar). Concern was expressed that the current framework was unable to capture and explain the most essential features of health inequity: justice and need. A presentation (Makhloul), based on research in Lebanon, explored non traditional routes and pathways of health inequity and argued for a socio-ecological framework that includes people's perspectives of health inequity and implements non conventional measures of wellbeing.

Theme II: Determinants and measures of health inequity

Papers presented in this theme introduced new dimensions drawing on case studies from the Arab region and beyond. The significant role of political context was illustrated by a study of Albania and its transition from a communist to a market economy (Murthi). The ensuing economic instability has created an unequal society and restricted the government's commitment to social provision impeding the health system's ability to provide accessible and affordable health care for all. The other three papers in this theme investigated new or neglected health inequity dimensions within the Arab region. One paper focused on the high rate of traumatic vehicle crashes and accidents in many Arab states(Sadig), a second used self-assessed health to measure the persistence of health inequality in Jordan despite general improvements in the performance of the health sector (Nimeh), and a third paper focused on health insurance inequities in Egypt (Shawkey).

Theme III: Health inequity in reproductive health

The session began with a presentation of Arab countries' path toward attaining the Millennium Development Goals (MDGs) and the importance of reducing maternal mortality as part of the MDGs (Adawy). Subsequent papers examined men's involvement in reproductive health care in Algeria noting Algerian women's desire for greater men's involvement in their reproductive health and the general need for greater gender equity in reproductive health care for both men and women (Cherif). A third paper, investigated the impact provider incentive schemes in Egypt have on quality of care measured in terms of beneficiary responses, noting that while such incentives increased the quality of care, when not uniformly applied, also created health inequity within the health system(Zaky). The last two papers focused on inequities in antenatal and maternal health services in Yemen and Nigeria. A study of antenatal care services in Yemen from 1991-1993 showed improvements in the percentage of pregnant women reporting having more than one antenatal care visit but also revealed constant high inequities between the poorest and the richest quintiles of women surveyed. The study concluded, however, that lack of awareness, lack of services and distance are the major challenges to scaling up antenatal care service coverage in Yemen (Halas). Data from the 1990, 1999 and 2003 Nigeria Demographic and Health Surveys showed that access to maternity care in Nigeria is generally low, is worse in rural areas than in urban areas, lowest among women under 20 years and lowest in the Northwest region of Nigeria, but that use of maternity care services increases with the mother's education and increasing wealth quintile. The paper concluded that increasing women's education is one of several means to improve the status of maternity care in Nigeria (Nwogu).

Theme IV: Health inequity in child health

The first session focused on child health and the second on nutrition. The first paper in session one, presented data on disparities in child health in the Arab region during the 1990s showing within-country disparities in child health by gender, residence (urban/rural) and maternal educational level (Khawaja). While Arab countries have experienced an impressive decline in child mortality rates during the past few decades, gaps in mortality by gender and socioeconomic status still persist. The tenacity of pervasive intra-country socio-economic disparities in child health calls for attention by policy makers and health practitioners. In Yemen, there has been a significant decline in trends in under-five-mortality between 1991 and 2003 (Al Kebsi). However, these declines have not been accompanied by a narrowing gap between the various social groups in the population as measured by wealth index and educational attainment of mothers and fathers. The study noted the significant impact of mothers' education on child health and called for more parental investment in child education as a strategy towards improving levels of health inequity. A study of child health among the

poor in an urban slum in Greater Mumbai revealed very low levels of utilization of health services for children of illiterate women despite high levels of child morbidity and mortality in the study area (Sarode). The study's policy recommendations stressed the need to extend child care services to the poorest stratum of illiterate women. A study of injury related morbidity and mortality among children aged 1-4 years in Bangladesh revealed significant inequalities among income groups with poor children 2.8 times more likely to have experienced injury mortality adjusting for other factors (Giashudan).

Papers in the second session in this theme focused on childhood malnutrition and food security. A study using nutritional data from Sudan Household Health Survey (SHHS) on children under-five revealed that malnutrition was higher among children born to illiterate mothers compared to those whose mothers were educated (Osman). There was a significant association between place of residence (urban/rural) and malnutrition; rural areas were characterized by higher levels of child malnutrition compared to urban settings; and levels of malnutrition were highest in the poorest households A study of food insecurity and child workers in Brazil examined how hunger and the risk of hunger may play a role in the decision to send children to work (Hoover and Levison). The study revealed that working children suffer not only from higher levels of food insecurity than non-working children, but that they are more likely to report levels of food insecurity that lead to hunger. They concluded by stressing the impact of incorporating a food security approach to dealing with child labour since it may provide a more comprehensive and effective method to reducing the incidence of child labour and enhancing the health and well-being of children. The last paper in the session explored inequity in food security assessed in terms of food consumption statistics derived from the National Food Consumption Survey-2000 for Egypt (Shihab) The study revealed that the ratio of stunting among children born in the lowest wealth quintile households were 2.5 times likely to experience stunting due to malnutrition compared to those born to households in the highest wealth quintiles. The same ratio was observed when comparing children born in rural and urban areas. Upper Egypt showed the highest levels of wasting among children compared to other regions in the country.

Theme V: Health inequity: measurement approaches

The papers in this session were mainly methodological and focused on new approaches in measuring and assessing health inequities and disparities. The first paper compared causal decomposition with the cause-deleted index as applied to racial mortality disparities using the 2000 United States vital statistics data (Steward). The two methods produce different results with the cause-deleted index producing smaller and often contrasting estimates for the contribution of underlying causes to racial mortality disparities The cause-deleted index is based on cause-deleted life tables and quantifies the role of underlying causes in mortality disparities as the change in the racial hazard ratio related to deleting a specific cause. The causal decomposition method conceptualizes disparities as absolute differences in mortality rates and fails to account for the fact that blacks are more likely to die from nearly all causes. As a result the causal decomposition method may produce biased estimates of the contribution of underlying causes to observed mortality disparities.

The second contribution examined the use of the achievement index in measuring inequity in child survival, immunization, and nutritional status among Indian states (Pradhan). The achievement index is especially useful in identifying the efficiency of current efforts to reach lower wealth groups and the impact these efforts have on the overall performance. Using data from the 2003 National Family Health survey, the study shows that with an increase in the

inequality aversion parameter, the adjusted health inequity scores rise, indicating higher vulnerability of poor populations compared to non poor.

The final paper examined maternal health indicators from DHS data in three countries in sub-Saharan Africa (Sacks). The analysis used four indicators: skilled birth attendant, contraceptive prevalence rate, AIDS knowledge and access to a health facility. The authors created six social strata including poverty status, education, region, and ethnicity that were used in addition to the more traditional wealth quintiles. The results showed that almost all disparities were found to be significant, although the stratifier with the strongest effect on health outcomes varied by indicator and by country. In some cases, urban-dwelling is a more significant advantage than wealth and in others, educational status trumps poverty status. The authors argued that statistically significant health gaps exist not just between rich and poor, but across other population groups as well, and multiple forms of disadvantage confer greater risk; policies must take into consideration these differences in order to reduce health gaps in access to key maternal health services

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Day 1: Saturday (16/2)

09:00 – 09:30 **Registration**

09:30 – 10:00 **Introduction and welcome**
Hoda Rashad and Zeinab Khadr

Health Inequity: Conceptualization Issues

10:00-11:00 **Session one**

- **Health Inequities: Recommendations on Framework and Measures**
  Jihad Makhloul
- **Expanding the knowledge base of the dynamics of health inequity: The role of socio-cultural and structural factors**
  P.K.B. Nayar

Chairperson: Hoda Rashad

Health Inequity: Measures and Determinants

11:00 – 12:00 **Session one**

- **Political Economy of Health in Transition Economy: Case of Albania**
  Manuela Murthi
- **Socioeconomic and environmental determinants of traumatic motor vehicle Crashes**
  Mohammed El Sadig

Chairperson: Abdesslam Boutayb

12:00-12:30 Break

12:30-2:00 **Session Two**

- **Self rated health status as a health measure: Numbers from Jordan**
  Zina Nimeh
- **Inequity in health insurance system in Egypt**
  Sherine Shawkey

Chairperson: Mohamed Moukhyer

2:00-3:00 Lunch

Day 2: Sunday (17/2)

Health Inequity in Reproductive Health

09:30 – 11:00 **Session one**

- **Meeting the maternal mortality goal in Arab countries**
  Maha el Adawy
- **Engendering Reproductive Health in Algeria**
  Asia Cherif
- **Inequity in responsiveness in health system in Egypt**
  Hassan Zaky

Chairperson: Magued Osman

11:00 – 11:30 Break

11:30 – 01:00 **Session two**

- **Inequity in antenatal care services among different wealth quintiles in Yemen 1992-2003**
  Yara Halas
- **Differential in maternity care in Nigeria**
  Eleazar.C. Nwogu

Chairperson: Marwan Khawaja

01:00 – 02:00 Lunch

Health Inequity in Child Health

02:00 – 04:00 **Session one**

- **Disparities in Child health in the Arab Region during the 1990's**
  Marwan Khawaja
- **Child Mortality in Yemen & health inequity**
  Tareq Yahya Al kebsi
- **Child morbidity and mortality in slums in Greater Mumbai**
  Vijay Madhukarrao Sarode

Chairperson: Maha el Adawy

Day 3: Monday (18/2)

09:30 – 11:30 **Session Two**

- **Income Inequality In Child Injury In Bangladesh-Implication For Developing Countries**
  M Sheikh Giashuddin
- **Inequity in nutritional status of children under five in Sudan**
  Khalda Osman
- **Child labor, hunger and vulnerability: Evidence from Brazil**
  Natalie Hoover and Deborah Levison
- **Social inequity in nutrition status of children in Egypt**
  Dina Shihab

Chairperson: Hussein Abdel Aziz

11:30 – 12:00 Break

Health Inequity: Measurement approaches

12:00 – 01:30 **Session one**

- **The cause deleted index: Estimating the role of underlying causes of racial disparaties in dying**
  Quincy Thomas Steward
- **Assessing health inequalities among Indian children: A decomposition analysis**
  Jalandhar Pradhan
- **Delivering on the MDGs? Equity and maternal health in Ghana, Ethiopia and Kenya**
  Emma Sacks

Chairperson: Ahmadreza Hosseinpoor

01:30 – 02:00 **Wrap Up and closing session**

2:00-3:00 Lunch

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List of Participants

	Name		Country	Status	Fund
1	Assia Cherif	Institut national de la planification et de la statistique	Algeria	Presenter	Funded
2	Deborah Levison	University of Minnesota	USA	Presenter	
3	Dina Shihab	National Nutrition Institute	Egypt	Presenter	
4	Eleazar Nwogu	Michael Okpara University of agriculture, Nigeria	Nigeria	Presenter	Funded
5	Emma Rose Sacks	Johns Hopkins School of Public Health	USA	Presenter	Funded
6	Faten Abdel Fattah	American University in Cairo (SRC)	Egypt	Presenter	
7	Hassan Zaky	American University in Cairo (SRC)	Egypt	Presenter	
8	Jalandhar Pradhan	International Institute for Population Science(IIPS)	India	Presenter	Funded
9	Jihad Makhoul	The American University in Beirut	Lebanon	Presenter	
10	Khalda Osman Abd Elghafar	Ministry of Health, Sudan	Sudan	Presenter	Funded
11	M Sheikh Giashuddin	Centre for Injury Prevention and Research Bangladesh, Dhaka	Bangladesh	Presenter	Funded
12	Manuela Murthi	Statistical Research Center Information & Technology; Tirana	Albania	Presenter	Funded
13	Marwan Khawaja	American University of Beirut	Lebanon	Presenter	
14	Maha El Adawy	UNDP, NY	Egypt	Presenter	
15	Mohammed El-Sadig	UAE University	UAE	Presenter	Funded
16	Natalie Hoover	University of Chicago	USA	Presenter	
17	Pkb Nayar	Centre for Gerontological Studies, Kerala State, India	India	Presenter	Funded
18	Quincy Stewart	University of Michigan	USA	Presenter	
19	Sherine Shawky	American University in Cairo (SRC)	Egypt	Presenter	
20	Tareq Yahya al-Kebsi	Central Statistical Organization, Yemen	Egypt	Presenter	
21	Vijay Madhukarrao Sarode	Mulund College of Commerce, Mumbai	India	Presenter	Funded
22	Yara Halasa	Schneider Institutes for health Policy, Brandeis University	Jordan	Presenter	Funded
23	Zina Nimeh	Maastricht Graduate School of Governance,	Jordan	Presenter	
24	Zeinab Khadr	American University in Cairo (SRC)	Egypt	Panel	
25	Abdesslam Boutayeb	Université Mohammed Premier, Oujda	Morocco	Panel	Funded

26	Mohamed Moukhyer	Ahfad University for Women, Omdurman	Sudan	Panel	Funded
27	Hoda Rashad	American University in Cairo (SRC)	Egypt	Panel	
28	Ahmedreza Hosseinpoor	WHO HQ		Observer	Funded
29	Alaa Abou Zeid	EMRO	Egypt	Observer	
30	Hussein Abdel Aziz	Cairo University	Egypt	Observer	
31	Magued Osman	Information and Decision Support Center, Egyypt	Egypt	Observer	
32	Nazeh Roudi	PRB	USA	Observer	
33	Ramadan Hamed	American University in Cairo (SRC)	Egypt	Observer	
34	Somaya El Saadany	American University in Cairo (SRC)	Egypt	Observer	
35	Bosina el Deeb	National Council for Women	Egypt	Observer	
36	Susan Watts	EMRO		Observer	