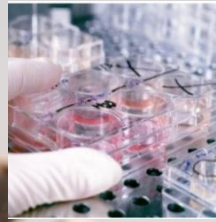




**NATIONAL INSTITUTE FOR  
OCCUPATIONAL HEALTH**

Division of the National Health Laboratory Service



# Male and Female Waste Pickers on landfills in Johannesburg, South Africa: Divergence in health and socioeconomic status.

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# Background

- Increasing presence of women in formal employment is mirrored in the informal work sector
- But over and above their work employed women often have extra daily tasks such as:
  - looking after children
  - and the elderly,
  - cleaning their homes,
  - and cooking



- Waste pickers collect and sell recyclable materials
- Not covered by OHS laws and are often on landfills illegally.
- Neither personal protective equipment, occupational health nor basic services are provided to them.
- There are no security or safety provisions for these workers on the landfills
- Their poverty increases their vulnerability



# Hazards on Landfills

- heavy workloads,
- violence,
- remnants of toxic or chemical substances,
- exposure to noise,
- vehicles and
- dust particles,
- injury from sharp waste,
- harmful microbial substances
- and pests





# Aim and objectives

Aim: To describe the chronic and acute health of men and women waste pickers on two Johannesburg landfills

- Describe reported health by gender
- Describe measured health by gender
- Investigate divergences



# Methods

- Quantitative cross-sectional descriptive study
- 2 large landfills in the South and West of Johannesburg
- Convenience sampling (from approximately 3600 wp)
- Interview and screening for BMI, BP, Hb, Blood glucose, and cholesterol using POC tests.
- Proportion tests and chi square analysis was used to compare men and women.
- Logistic regression was used to adjust for confounders such age

# Results

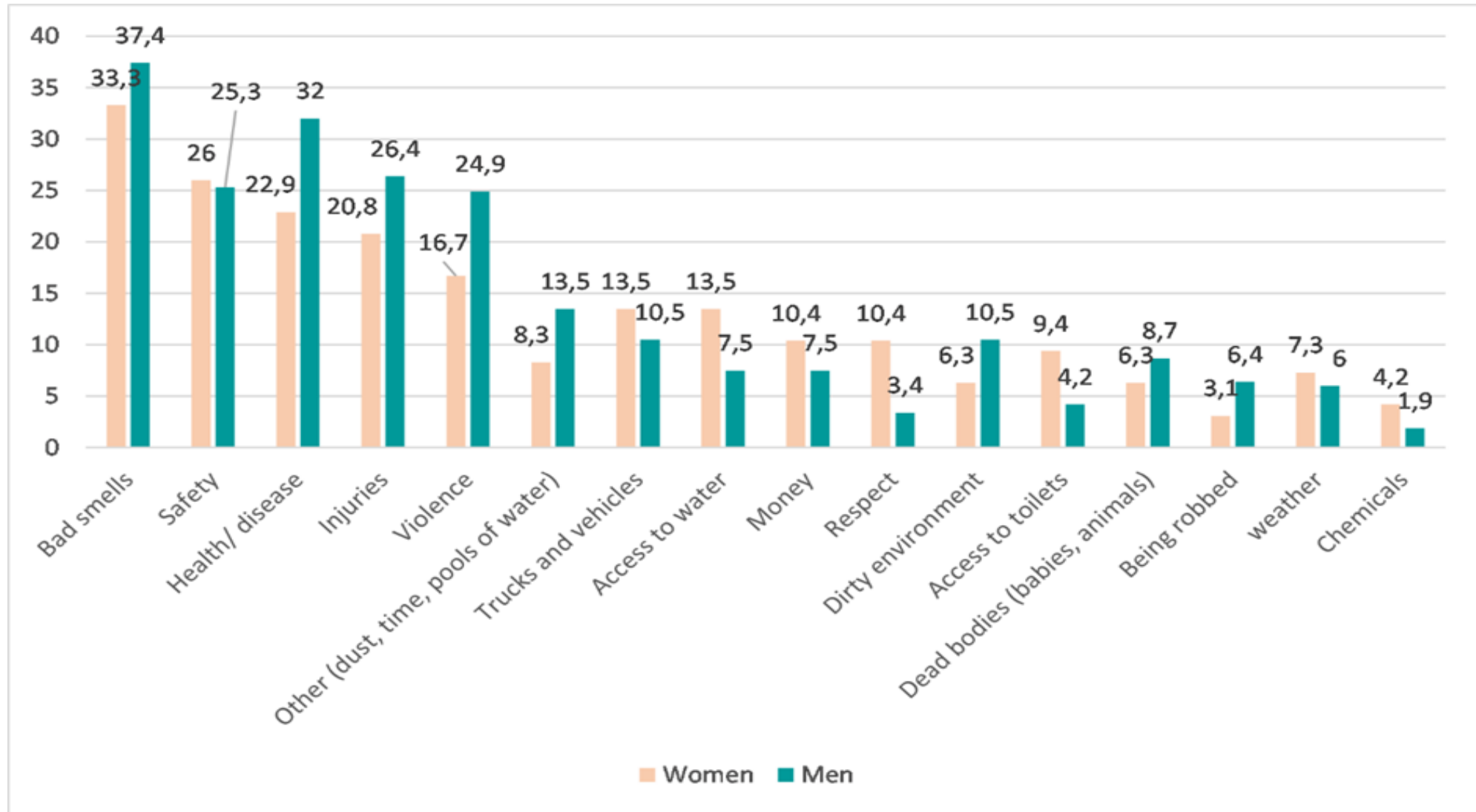
	Men n = 265	Women n = 96	Significant
<b>Median age</b>	30	38	*
<b>Secondary education</b>	85%	59%	*
<b>Nationality SA</b>	86%	69%	*
<b>Informal housing</b>	49%	59%	
<b>Household tap</b>	66%	75%	
<b>No people in house</b>	3.9	4.0	
<b>No children in house</b>	1	1,5	*
<b>Possible drinking problem</b>	28%	6%	*
<b>Current smoker</b>	86%	18%	*

# Work experiences

	Men	Women	Significance
<b>Median yrs worked on the landfill</b>	4	8	*
<b>Median hours per day</b>	7	6.5	*
<b>More than 5 days /week on the landfill</b>	48%	27%	*
<b>Mean Income</b>	R1906	R1480	
<b>Wash hands</b>	63%	87%	*
<b>Wear gloves</b>	84%	89%	*
<b>Work injury</b>	88%	90%	
<b>Heavy lifting</b>	88%	85%	



# Reported concerns on the landfill



# Health

	Men	Women	Significance
Self report - Diabetes	1.9%	3%	
-Hypertension	6%	18%	*
-HIV	7%	24%	*
- TB	2.7%	4%	
Self Assessed Health = Poor	30%	29%	
Visited a clinic in last 12 months	36%	54%	*
SRQ 20 score > 8	35%	34%	
Median Cholesterol mmol/L	2	3.9	*
BP systolic >140 or diastolic >90	16%	31%	*
Median BMI	20	23	*
Random glucose mmol/L	4,7	5,1	*

# Discussion

- Women at the POC care testing, suffered significantly worse health than men. They also reported more chronic disease.
- While more women indicated attending health services, but time away from work was an issue
- The only significant differences in work between men and women were the number of days worked by the women, type of waste collected and income.



- Income and education have been related to poor nutrition, which is in turn related to health.
- Women waste pickers reported earning a lower income.
  - Women WP did not collect electronics and few collected metals perhaps due to competition from the men,
  - they were also more likely to work five days a week rather than the 6 or 7 days worked by almost 50% of the men.
  - A study in South Africa by Schenk et al 2016 also found landfill that female landfill waste pickers earned less than the men and when explored the women reported that family obligations limited their time on the landfill.

- The causes of the divergence in the health of men and women in this vulnerable group need to be identified and managed.
- Access to health and safety
- Support to improve income generating opportunities

