Healthcare utilization and catastrophic health expenditure in rural Tanzania: does voluntary health insurance matter?

Presenter:

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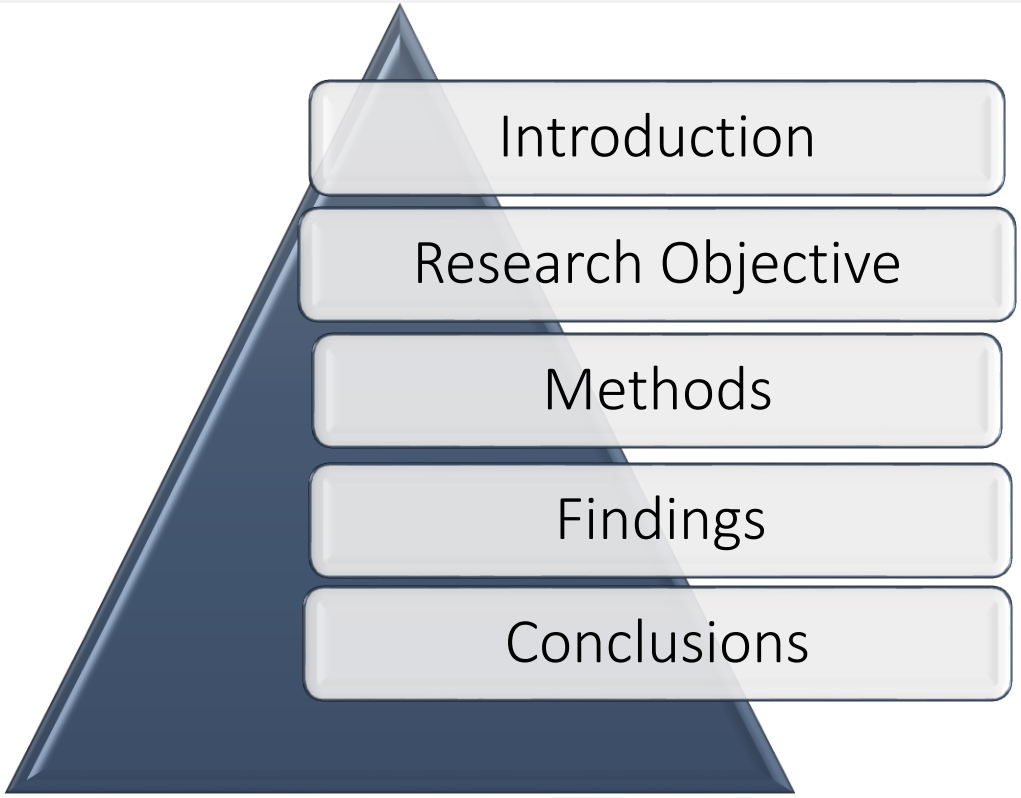
Presentation Outline



Definitions

- iCHF-Improved Community Health Fund

- CHE-Catastrophic health expenditure;
  - ✓CHE as the 40% share of the household's capacity to pay (non-food expenditure) (CHE_{T40})

Introduction (1)

Healthcare financing

- Globally, expenditure on health accounts for less than 10% of the GDP
- Over 150 million people suffer financial catastrophe each year due to OOP payment.
- 100 million are Impoverished every year, due to CHE
- OOP expenditure is above 40% of the total health spending in LMICs.
- The financial cost for NCDs is estimated to be $11.2 bill per year

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Introduction (2)

LMICs

- have less access to essential healthcare services
- The global burden of disease is much higher
- 77% of all NCD deaths are in LMICs.
- OOP expenditure are high
- Low health insurance coverage

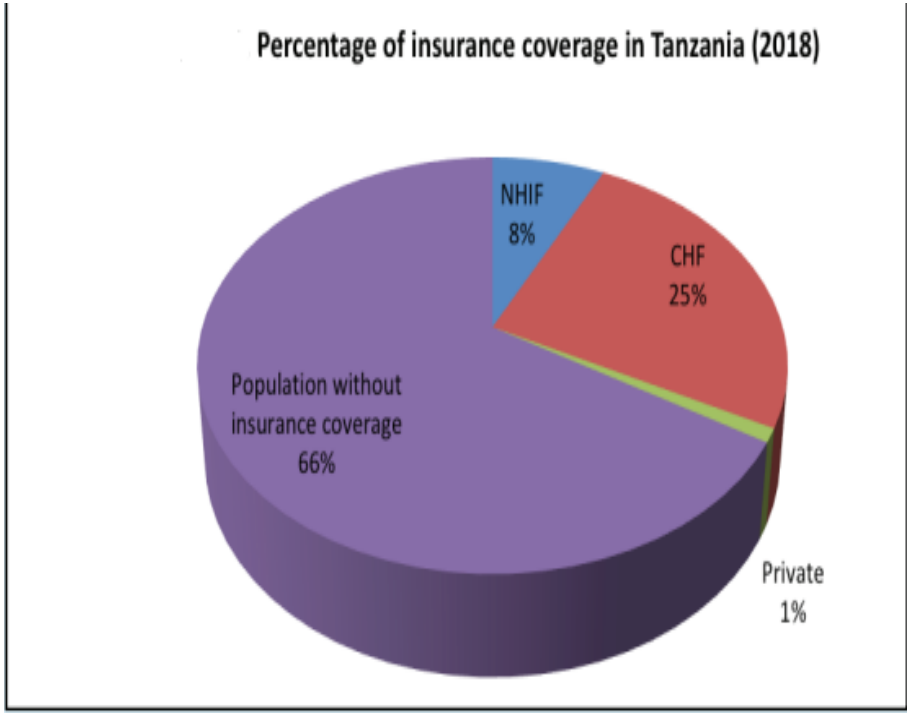
In Tanzania,

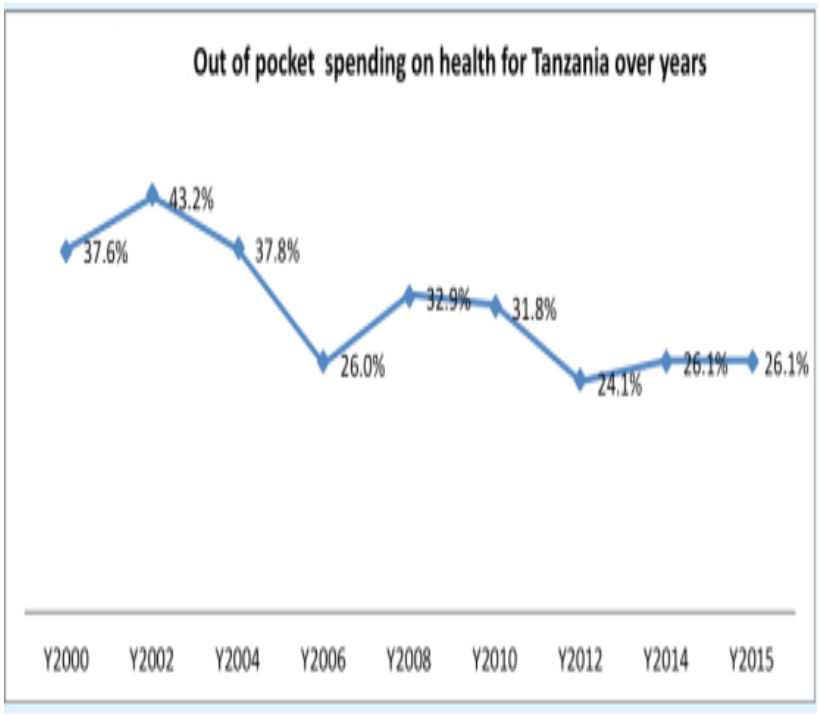
- the OOP payments account for about 24% of total health expenditure.
- Insurance coverage is less than 35%
- NCDs accounts for about 33% of all deaths
- Expenditure on NCDs is around $160millions per year

Community Health Fund (CHF)

CBHIS is thought to be a solution to catastrophic health expenditure in LMICs and means of achieving UHC	
CHF a form of CBHI in Tanzania	• Introduced in 1996 • Reformed to iCHF from 2011
In Tanzania, over 65% of the Population is with no health insurance	
Majority reside in rural area and/or employed in the informal sector	• Less access to healthcare services. • High OOP expenditure

Insurance status and OOP in TZ





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Objective

To compare healthcare utilization and the incidence of catastrophic health expenditure (CHE) among members and non-members of iCHF households in rural Tanzania

Methods

Design- cross-sectional household survey

Approach- Quantitative study

Study area- Two districts (Bahi and Chamwino) in Dodoma region, central Tanzania.

Sampling procedures and sample size

- Sampling technique- Multistage sampling to select wards and villages,
- Bahi (8 wards and 16 villages)
- Chamwino (10 wards and 20 villages)
- To select households, systematic random sampling technique was used.
- The total sample size was 722 households
- Bahi 303 and Chamwino 419 households

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Data analysis

CHE was calculated by dividing OOP health expenditure to non-food household expenditures

CHE = (HE/NFE) *100 Where, HE = average household monthly OOP health expenditure; NFE = average household monthly non-food expenditure.

CHE was coded as ‘1’, if CHE exceeded the Threshold of 40%, and ‘0’ if otherwise.

logistic regression assessed the association between CHE and iCHF membership status

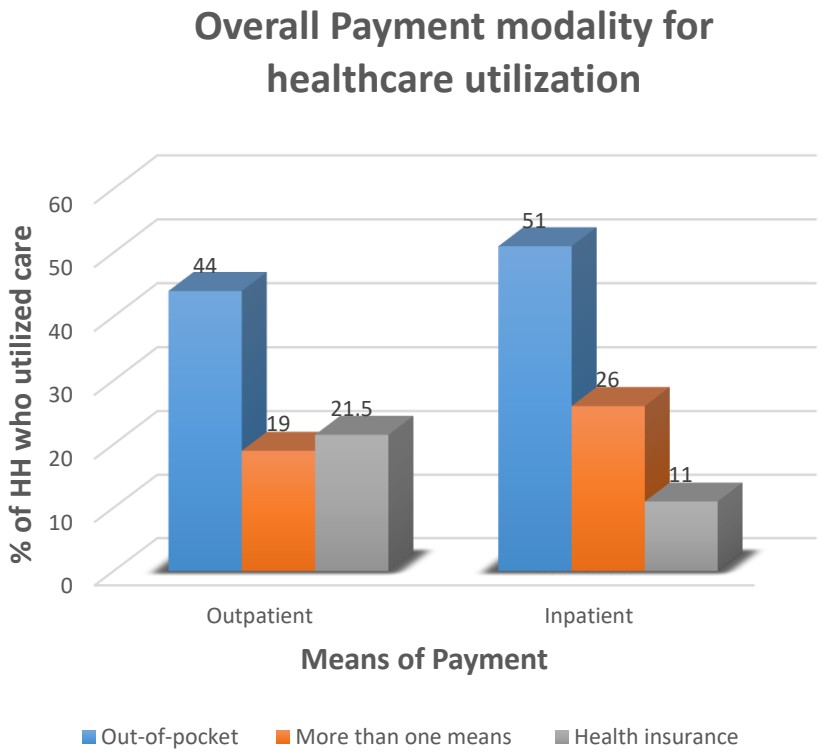
SES was constructed using total expenditure as a rank variable.

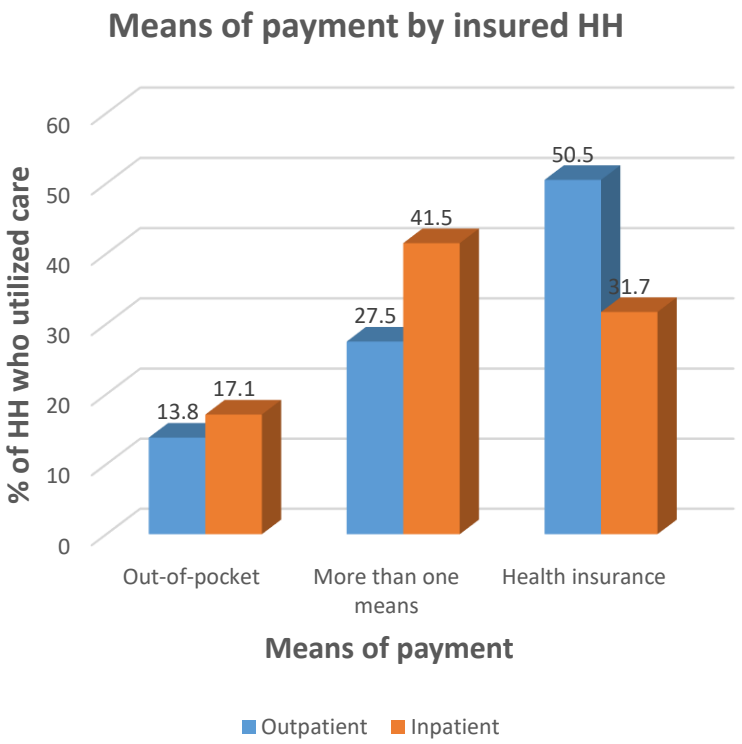
Results

Descriptive statistics

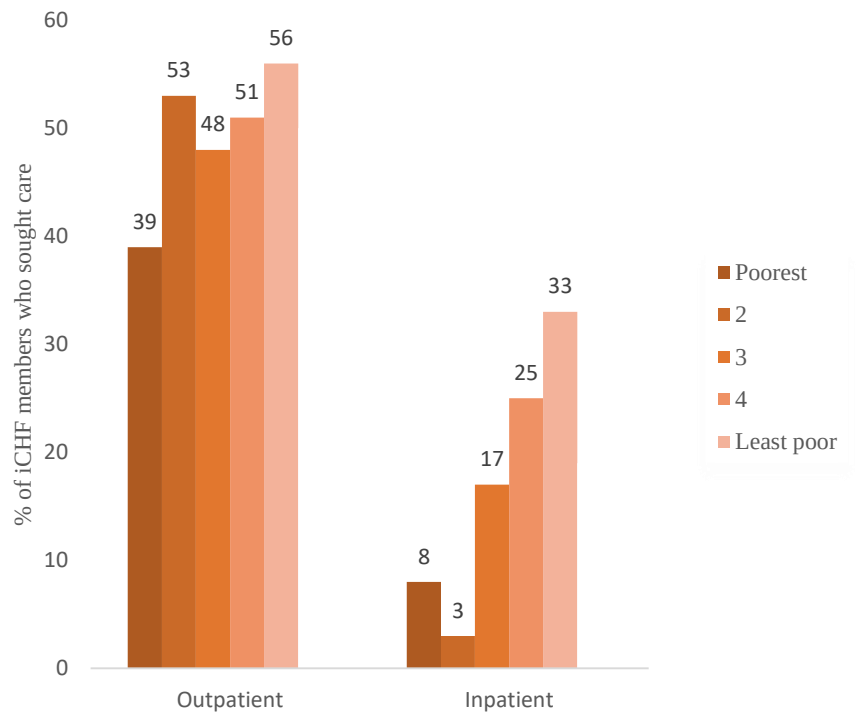
- The mean age was 44.67
- About 57% were female
- 72% were married.
- 72% had completed primary education
- 74% were farmers
- Those who sought OPD care for the past one month accounted for 35% of 722 respondents and
- 16% sought inpatient care in the past one year.
- 30% members of iCHF, 70% Non-members

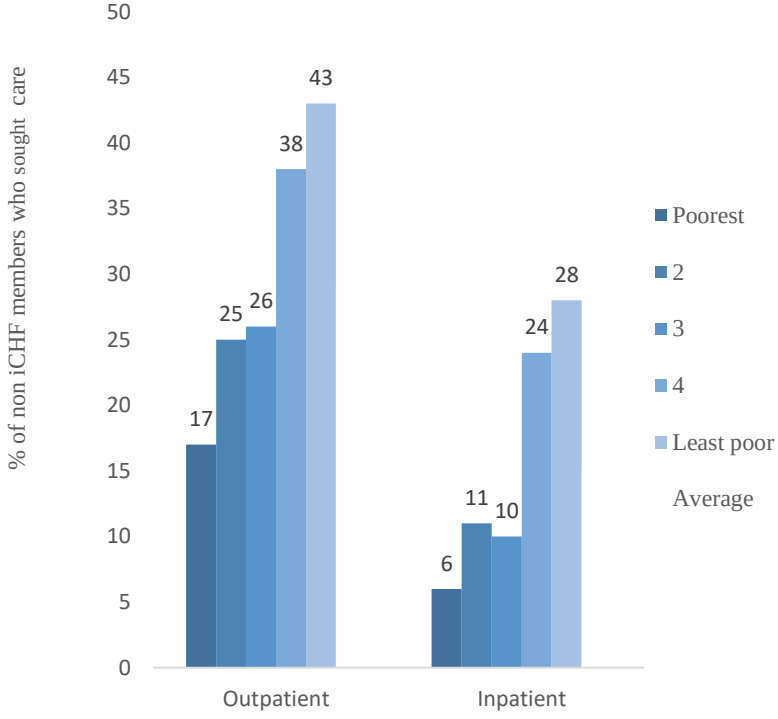
Means of healthcare financing





Proportion of households utilizing healthcare services by enrolment status





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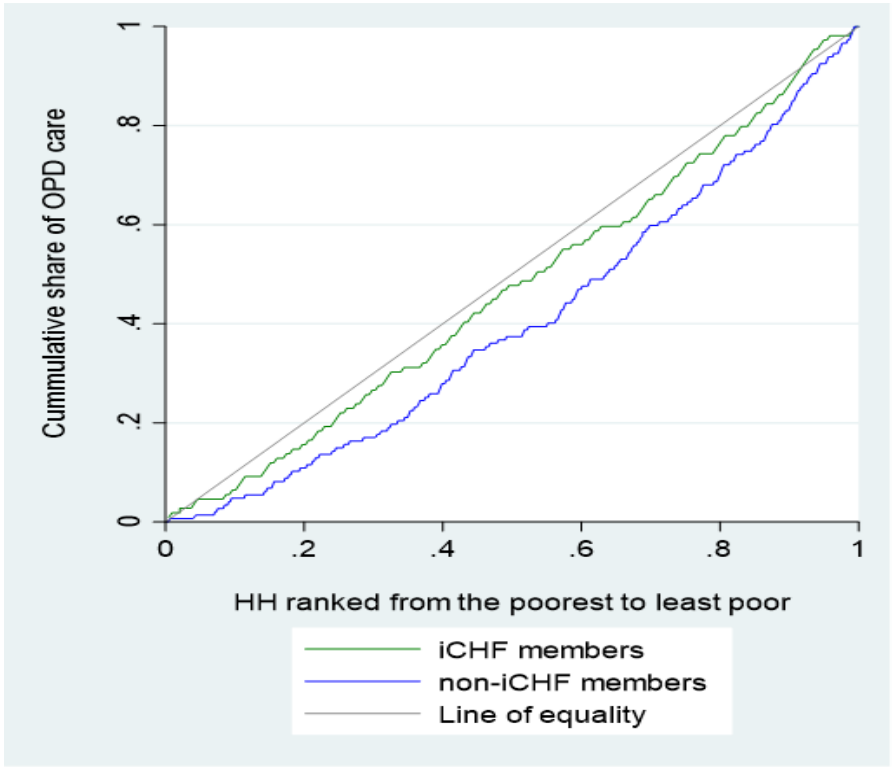
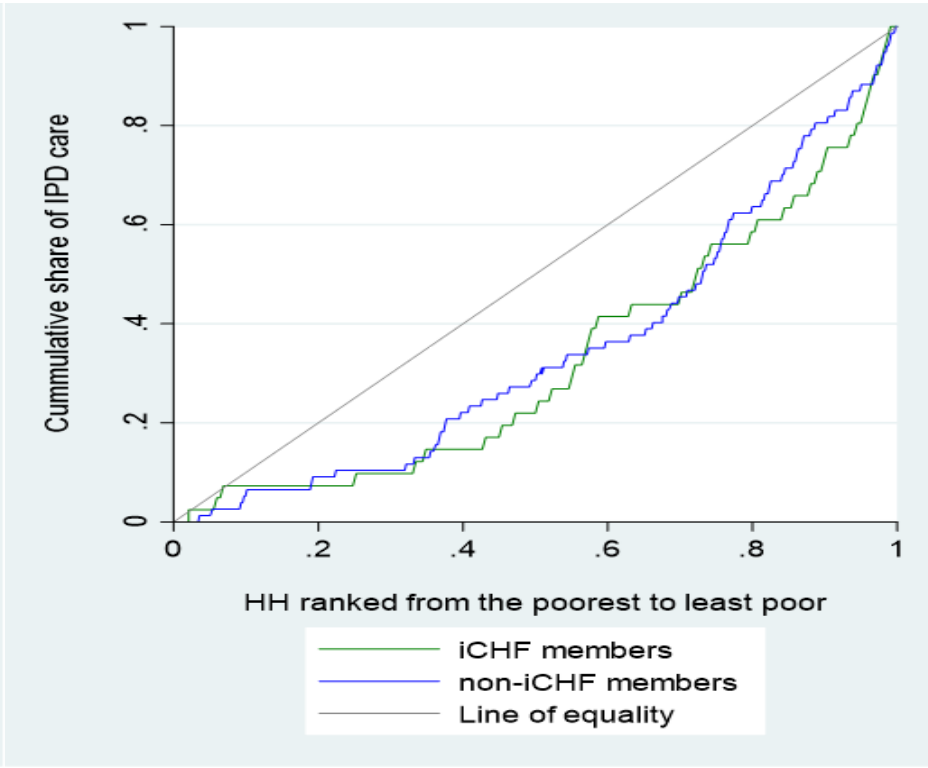
Overall, the insured made more visits across all wealth quintiles compared to the noninsured.

The poorest were less likely to utilize care compared to the least poor hh for both insured and noninsured.

Concentration index curves for utilization of outpatient care and inpatient care





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CC & CI, Dominance

socioeconomic inequality-more pro-rich

The level of inequality-more pronounced for IPD with a CI of 0.38 for the insured and 0.29 for the noninsured, Less in OPD with a CI of 0.09 for the insured & 0.16 for the noninsured HH.

HH in the least poor quintiles had higher utilization of care compared to the poorest HH regardless of insurance status.

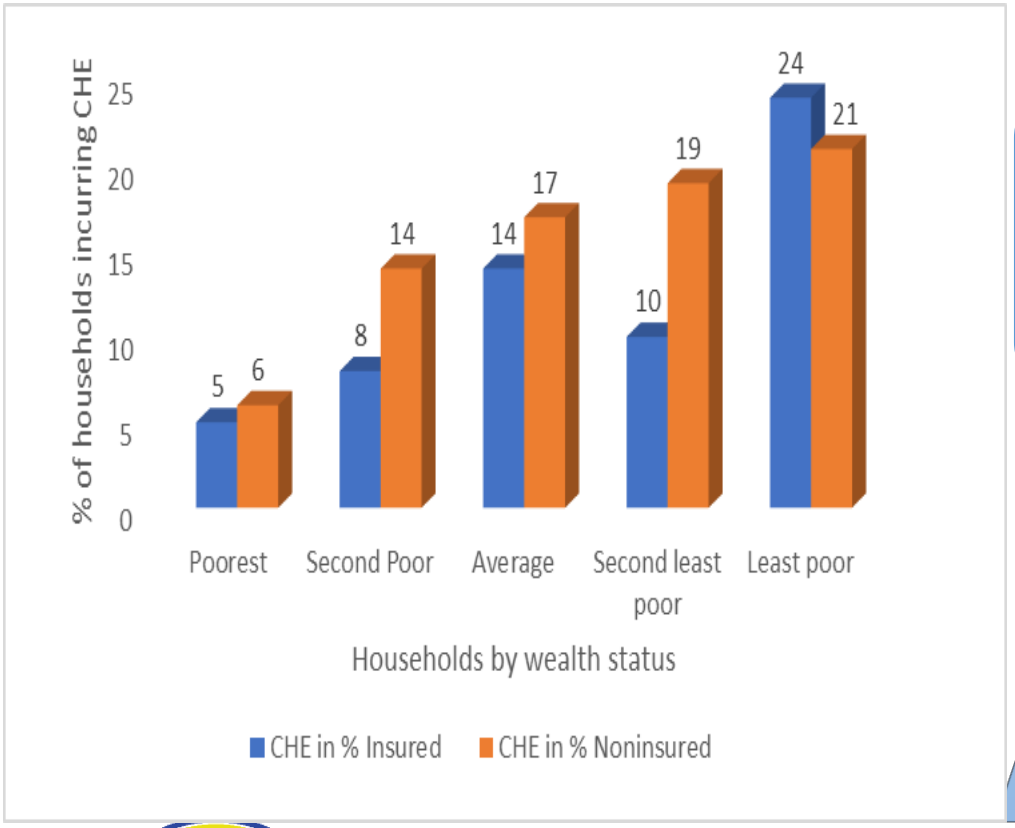
Dominance present in OPD

No dominance in IPD

The Incidences of CHE among members and non-members of iCHF

Overall	• CHE>40% =15%
CHE_{NF40}	• CHE>40% =15% among non-members of iCHF • CHE>40% =13% among members of iCHF

Socioeconomic inequality and CHE by iCHF membership status



Regardless of the insurance status, the incidence of CHE increased with an increase in wealth status.

The incidence was relatively higher among the non-insured for all wealth groups except the least poor

Regression results (1)

CHE were less likely to occur among;

- HHs who are members of iCHF, (OR=0.41, 95%CI: 0.27-0.63)
- Respondents with good health state,
- Households with secondary education and higher,
- Households headed by female, and
- Respondents who are married

Regression results (2)

CHE was more likely to be experience by;

- All Socioeconomic status groups,
- Households with presence of under 14 years children,
- Households with at least one member with chronic illness,
- Households with at least one member hospitalized (OR=32.87, 95%CI: 25.67-42.11)
- Households with at least one members who received OPD care, (OR=8.66, 95%: 5.03-14.91)

Conclusion

- Although the Odds of an insured household incurring CHE was lower compared to non-insured hhs, iCHF did not eliminate the catastrophic OOP payments for healthcare among insured hhs

- Therefore, more studies are needed to establish the relatively high incidence of CHE among the iCHF insured members.

Thank you

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