

INDIVIDUAL AND HEALTH-SYSTEM FACTORS ASSOCIATED WITH PREMATURE DISCHARGE FROM HEALTH FACILITIES AFTER VAGINAL BIRTH IN TANZANIA: A MULTILEVEL ANALYSIS USING DHS AND SPA

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Introduction

- Length of stay (LoS) in facilities after birth depends on health systems, healthcare facilities and their respective guidelines, and the health and support needs of women and babies.
- The World Health Organization recommends a LoS of 24 hours after vaginal birth. Discharge from health facility after birth is considered “**premature**” when women leave the facility within less than 24 hours after giving a vaginal birth.
- Our objective is to estimate the percentage of premature discharge and analyse factors associated with premature discharge among women who had a vaginal birth in health facilities in Tanzania.

Methods

- We analysed secondary data from the Tanzanian Demographic and Health Survey (DHS 2015-16), and Service Provision Assessment (SPA 2014-16) at the regional level.
- The sample size included 4,165 women who gave their most recent birth in a healthcare facility in the 5 years preceding the survey.
- We explored factors associated with premature discharge at the individual (e.g. obstetric history) and regional health-system levels (e.g. distribution of facility types). Bivariate then multivariate multilevel analyses were conducted using Stata, adjusting for complex survey design.

Results

Premature discharge affected **54.3%** of women.

Lowest:
27% in Kilimanjaro

Highest:
84% in Rukwa

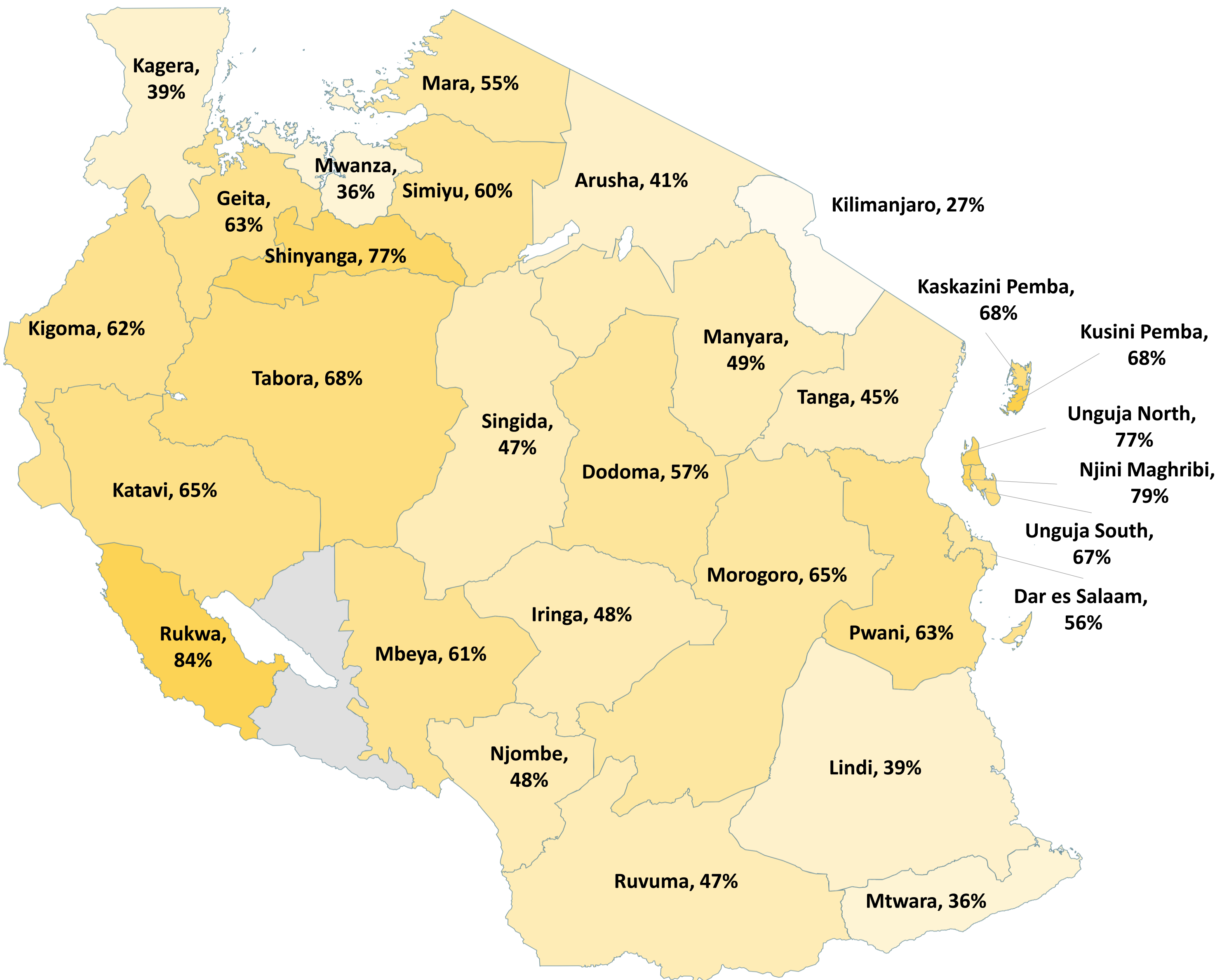


Figure 1 – Regional estimates of percentage of premature discharge (<24 hours) among women who gave their last vaginal birth in a health facility in Tanzania (DHS 2015-2016)

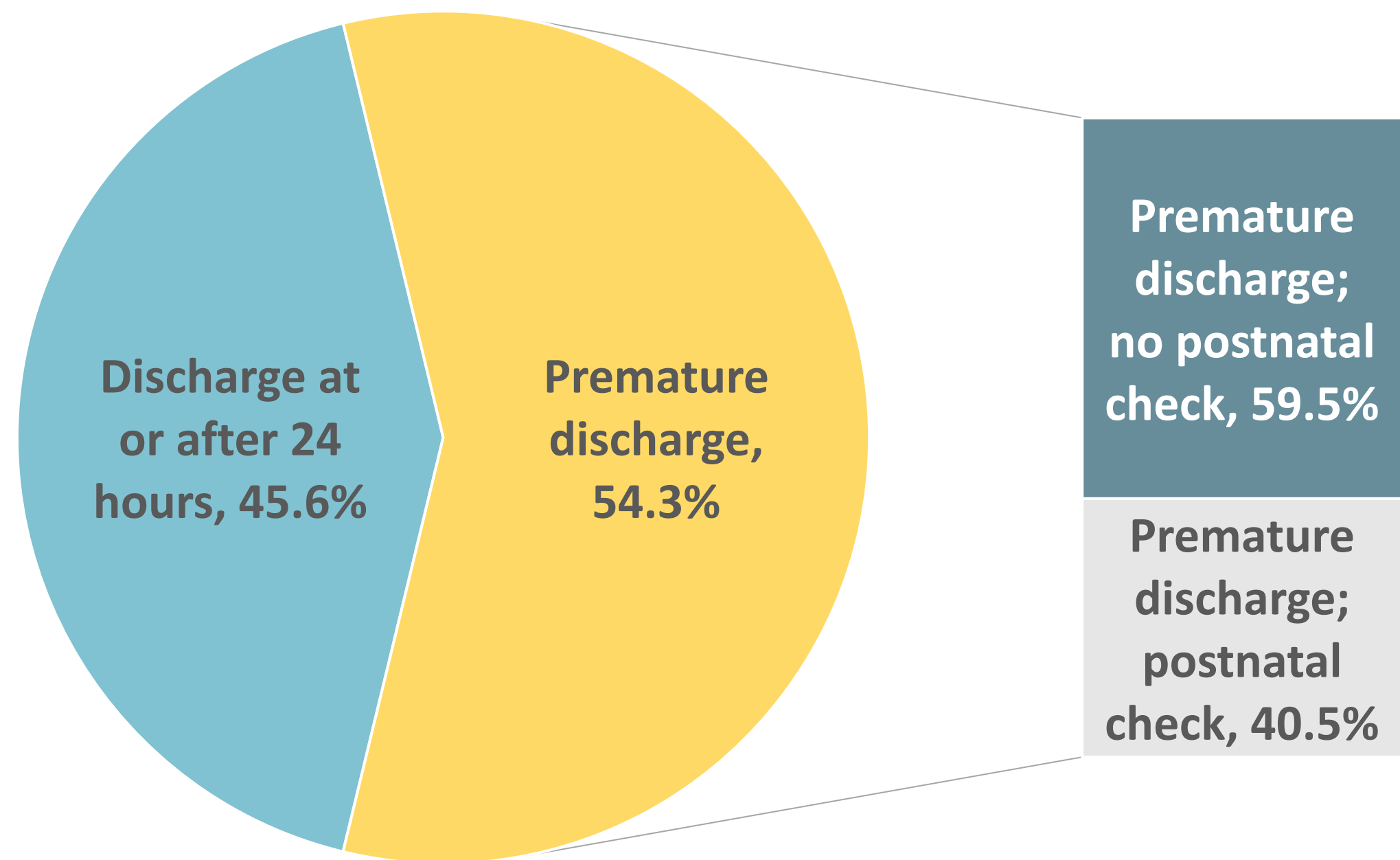


Figure 2 – Estimates of percentage of premature discharge and reception of a postnatal check before discharge among women who gave their last vaginal birth in a health facility in Tanzania (DHS 2015-2016)

Almost two thirds (59.5% [95% CI 57.3%; 61.7%]) of women who left the health facility before 24 hours, did **not receive a health check** from a care provider in the health facility (**Figure 2**).

Results (*continued*)

- Increased odds of premature discharge among women who:
- Gave birth in public lower-level facilities (aOR=2.2; p-value<0.001),
 - Were multiparous (aOR=1.61; p-value=0.002),
 - Lived in regions with higher proportion of facilities that do not have maternity beds (aOR=3.49*10¹⁵; p-value<0.001).

Factors protective against premature discharge were:

- Health insurance coverage (aOR=0.66; p-value=0.024),
- Multiple births (aOR=0.33; p-value=0.004),
- Being employed (aOR=0.82; p-value=0.019),
- Living in regions with higher proportion of public & private hospitals out of all facilities (aOR=9.8*10⁻¹⁰; p-value<0.001).

Conclusions

In Tanzania, different factors influence LoS at the individual and regional level. In regions with lower proportions of facilities with maternity beds, women could be discharged early for lack of space.

Health-system structures determine the duration of support available to postpartum women.

It is crucial to document postpartum women’s needs regarding LoS, and ensure that protocols respond to those needs.

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