



End-line Evaluation of the Project 'Improving Effective Coverage of Maternal, New-born and Child Health Interventions for Reducing Preventable Child Deaths' in Tangail and Khulna



Background of the Study

Bangladesh has achieved success in reducing U5 & maternal mortality in last decade. UNICEF is partnering with GoB to contribute to reduce maternal and newborn deaths. To this end, MoH&FW with partnering with UNICEF and technical support from KOIKA implemented a MNCH project (IECMNCH) in Tangail and Khulna in line with UNICEF's efforts to pay attention to low performing upazilas and HTR areas, started in 2015 .

- designed to address main causes of newborn deaths (birth asphyxia, infection, prematurity)
- to increase availability, utilization of quality MNCH-&-Nutrition services by
 - increasing, sustaining of effective coverage of selected interventions;
 - strengthening health system with increased availability & access to quality MNCH services;
 - positive behaviour & social norm change through community participation & ownership for effective demand creation for increased utilization of MNCH services.

A baseline study in 2015 and an endline evaluation study in 2018 were implemented by UNICEF. Here are the endline study findings with corresponding baseline findings where necessary.

Output of the project

Outputs of the project are:

- 1. Service providers at facility & community levels have increased capacity in delivering MNCH and nutrition services.
- 2. Local level health managers have increased capacity to conduct micro-planning, monitoring and evaluation.
- 3. Health facilities have increased capacity for Quality MNCH services as per standard protocols.
- 4. Family and community have increased capacity for healthy MNCH behaviour and practices

The ultimate outcomes of the project are:

- 1. Effective coverage of high-impact MNCH and nutrition services and practices is increased.
- 2. Availability of adequately trained staff and supplies is improved for MNCH & nutrition services.
- 3. Utilization of essential MNCH and nutrition services is improved at facility and community level.
- 4. Adequate coverage of essential MNCHN services is improved at facility and community level.

Objectives of the endline evaluation study

Overall objective of the endline study was to determine, as systematically and objectively as possible, the relevance, appropriateness and coherence of joint GoB-UNICEF-KOICA Health Programme (IECMNCH 2015-2019).

Specific objectives are:

- To identify the coverage of key health and nutrition interventions at district level;
- To identify the key barriers to accessing or acquiring the health and nutrition services, available in public facilities;
- To assess availability of resources and key MNCH services in health facilities and communities at both private and public levels
- To assess the service readiness of CC, UHFW, UHC and DH for MNCH services;
- To assess the knowledge, attitudes and practices of families and communities restricted to selected clusters, pertaining to key life saving behaviors and practices at household level
- To assess the achievement of project over the given environments, challenges and lessons learnt
- To evaluate Relevance, Effectiveness, Efficiency, Sustainability, and impact of the project (OECD DAC evaluation criteria)
- To provide information as a basis for making concrete recommendations and planning for improving MNCH activities

Methodology

Study Design

Quantitative and qualitative methods

Quantitative method

- Household Survey
- Health Facility Survey

Qualitative methods

- Focus Group Discussions (FGD)
- Key Informant Interviews (KII)
- Review of Documents

Methodology : Household Survey

Sample Size and Sampling Design

Two stage cluster sampling design was followed

First stage:

48 segments (clusters) each selected by systematic random sampling out of 200 clusters of baseline with 105 HHs, in each, of Tangail and Khulna

- 200 clusters were selected following PPS method during baseline

Second stage:

Selected 22-26 HHs (based on availability) out of 26 interviewed HHs at baseline + all HH with under-2 children in the cluster [thus, 30-38 HHs in each cluster]

Total Sample size: 31-38 HH×48 clusters = 1525 HH in Tangail and 1570 HH in Khulna district; Finally 3095 HHs for 2 districts

Methodology : Health Facility Survey

Coverage: Public, private and NGO health facilities

- **Medical College Hospital (MCH)**
- **District General Hospital cum Medical College (DGH cum MC)**
- **District General Hospitals (DGHs)**
- **Maternal and Child Welfare Centers (MCWCs)**
- **Upazila Health Complexes (UHCs)**
- **Upgraded Union Health and Family Welfare Centers (upgraded FWCs)**
- **Family Welfare Centers (FWCs)**
- **Union Sub-Centers (USCs)**
- **Rural Dispensaries (RDs)**
- **Community Clinics (CCs)**

Methodology : Health Facility Survey

Public facility:

- **District and Upazila level: All**
- **Union level: 2 unions/upazila selected randomly**
 - all government health facilities, i.e. FWCs, upgraded FWCs, RDs, USCs and CCs in the selected unions listed and surveyed.

Health facilities surveyed in Tangail: 61 and in Khulna: 50 (Total 111)

Methodology : Health Facility Survey

Gathered data to assess:

- Availability and quality of health facilities
- Health services including key MNCH, SCANU (Special Care Newborn Unit), ENC (Essential Newborn Care), and
- Capacity of service providers at community and facility levels

Techniques applied:

- Review of records
- Observations
- Interview with service providers/key officials

Methodology : Qualitative Methods

12 (3x4) Focus Group Discussions (FGD) with

- **Pregnant women**
- **Mothers/caregivers with under-five children**
- **Husbands and mothers-in-law of pregnant women and mothers of under-five children**

20 Key informant interviews (KII) with

- **Civil Surgeons**
- **Medical Officers-Clinic, Deputy Directors of Family Planning (DDFP)**
- **UH & FPO and UFPO**

Household Survey Findings

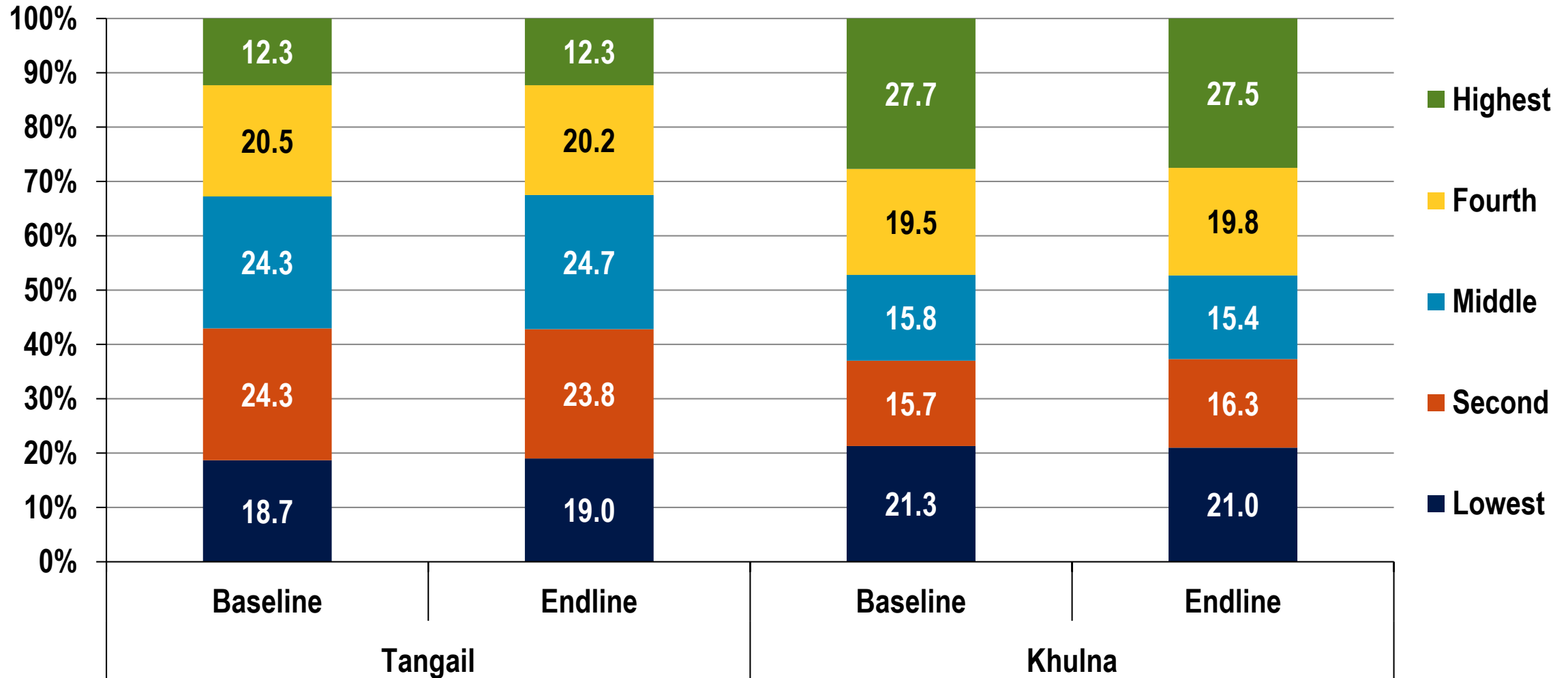
Housing Characteristics and Household Population

Household composition

Percent distribution of households by sex of household heads and household size				
Characteristics	Tangail		Khulna	
	Baseline	Endline	Baseline	Endline
Sex of household heads				
Male	87.2	87.0	93.4	94.1
Female	12.8	13.0	6.6	5.9
Total	100.0	100.0	100.0	100.0
Household size				
Average (mean) number of household members	4.2	4.4	4.4	4.6
n (number of households)	6523	1525	6517	1570

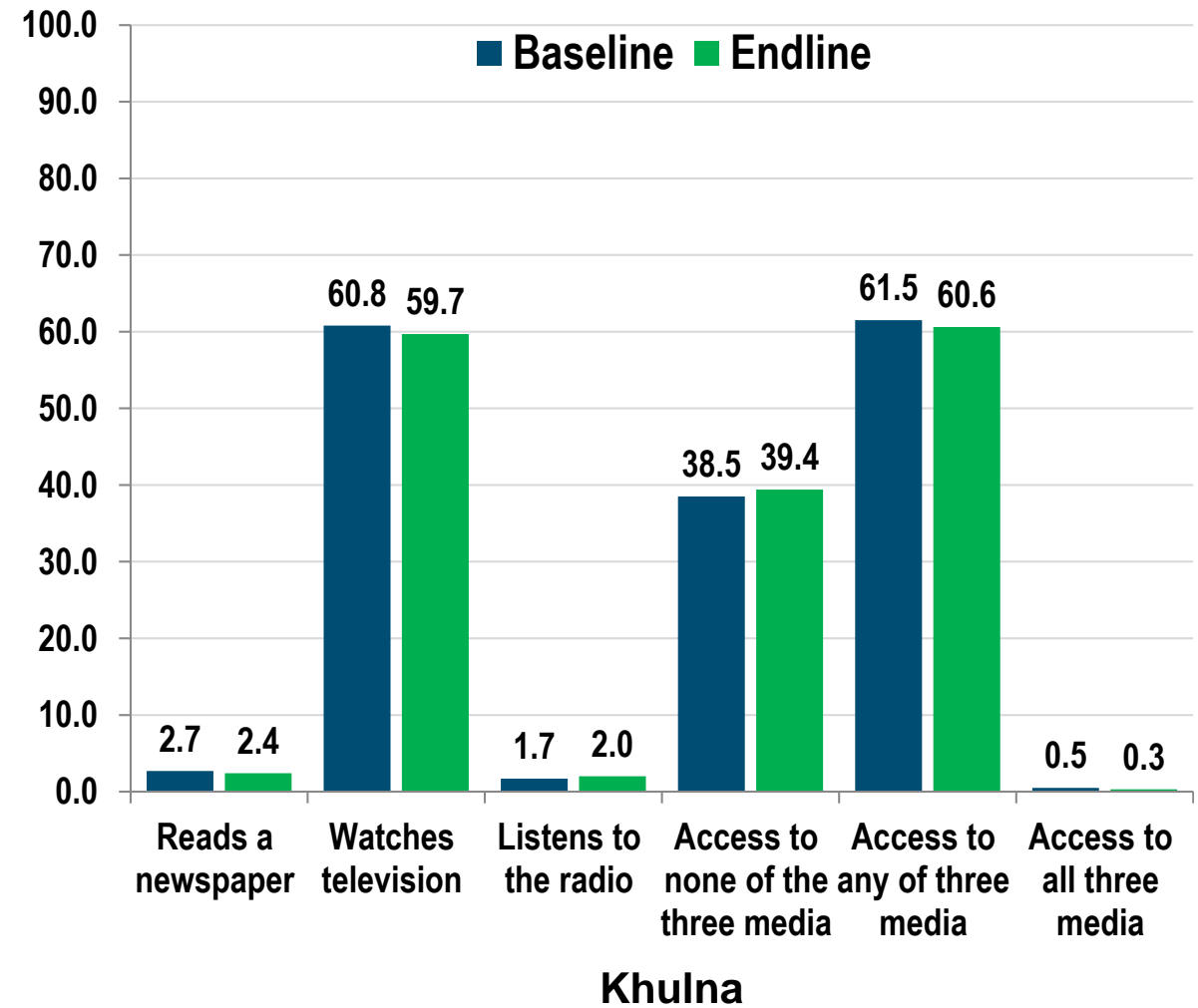
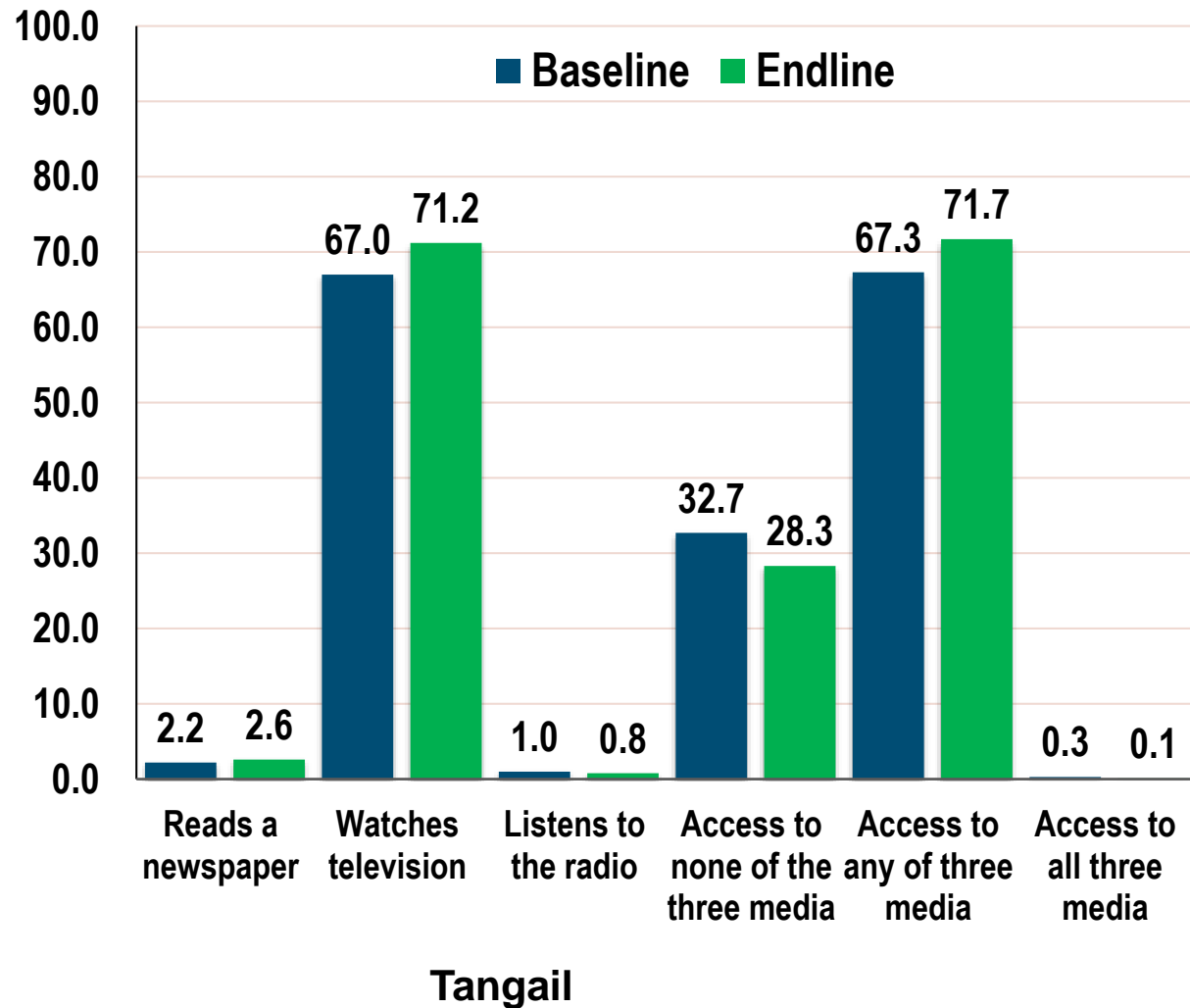
Findings: Male headed households (BDHS-2014: 87.5%)
 Average number of household members: (BDHS-2014: 4.5)

Household wealth category



Findings: % of highest/richest category in Khulna (28%) is more than two times higher than in Tangail (12%) (BDHS 2014: 19.9%)

Exposure of respondent women to mass media once a week



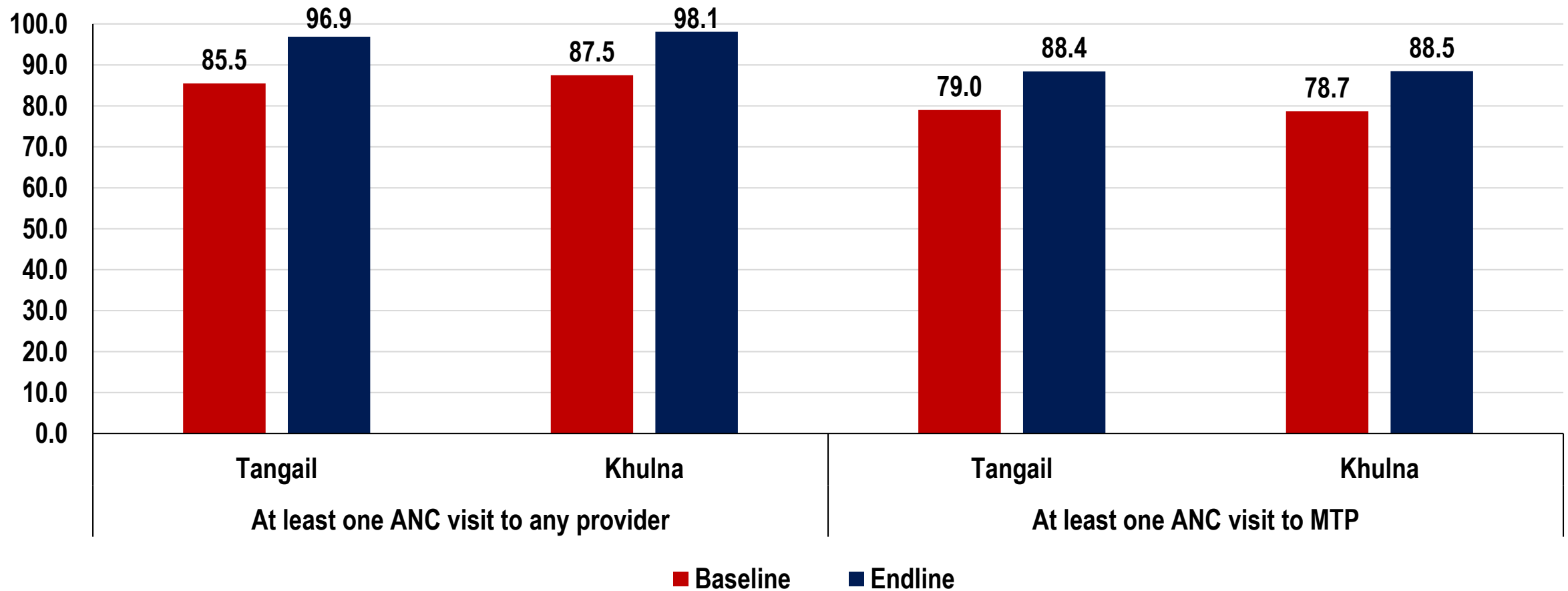
Findings: Access to none of 3 media once a week: (BDHS 2014: 47.4%)

Maternal Care

(among women age 15-49 years with a live birth in 2 years prior to survey)

Antenatal care (at least one ANC from any source or from MTP)

Antenatal Care

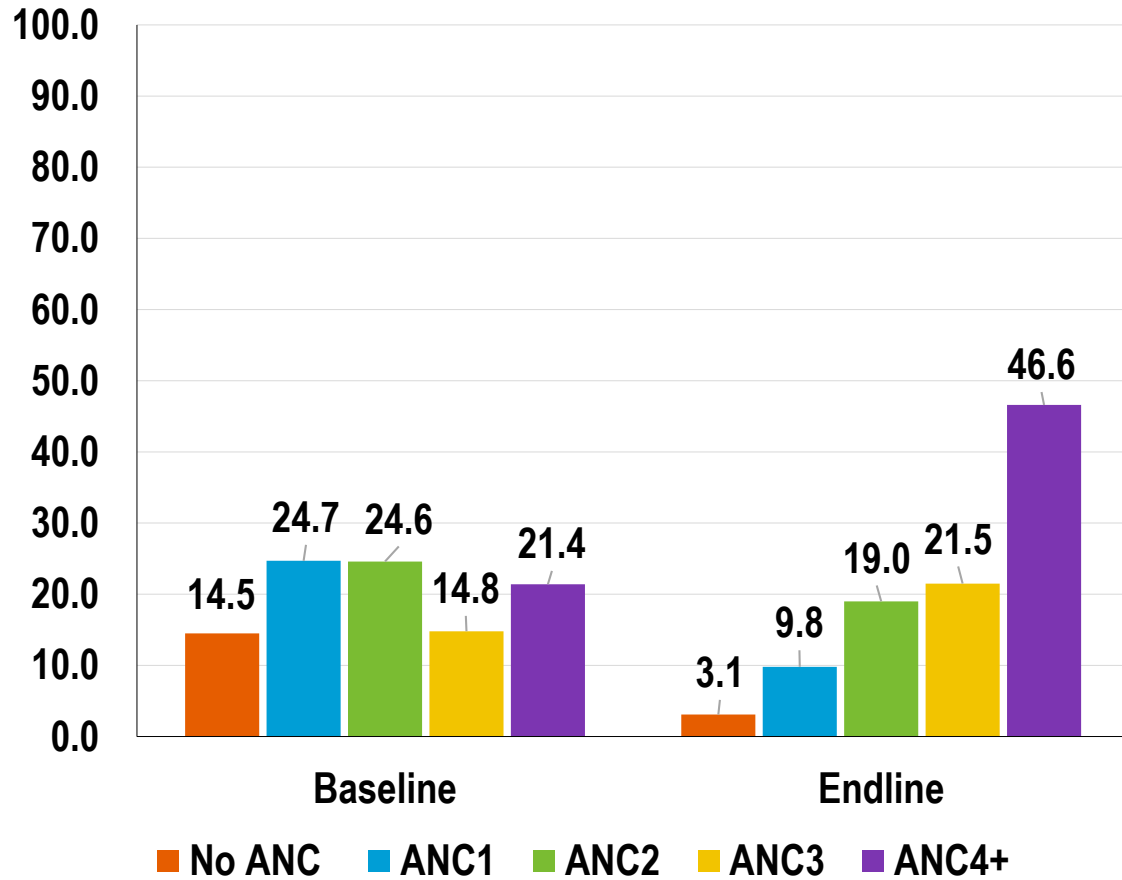


Note: Medically trained provider (MTP) includes qualified doctor, nurse, midwife, paramedics, sub assistant community medical officer, family welfare visitor and community skilled birth attendant

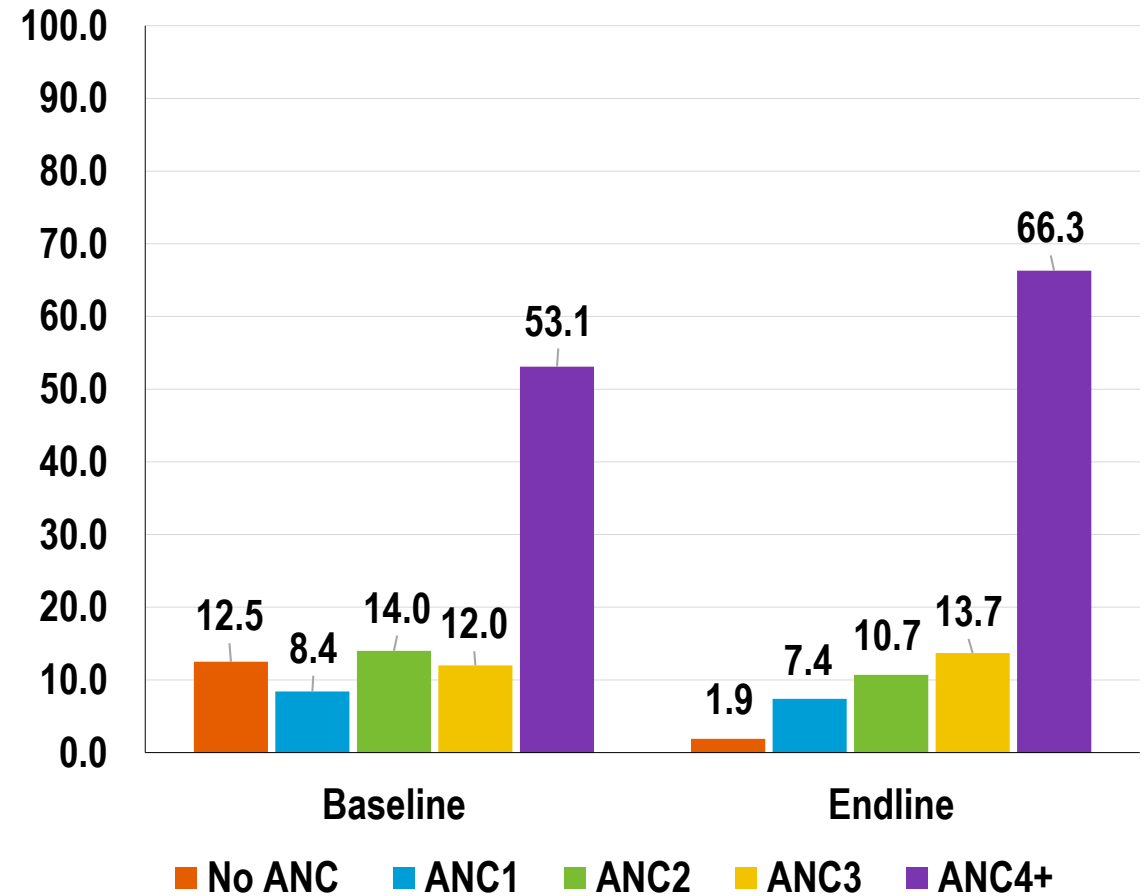
Findings: At least one ANC from MTP : National (BDHS 2014: 64%; BDHS 2017-18: 82%)

Number of ANC visits to healthcare providers

Antenatal Care



Tangail

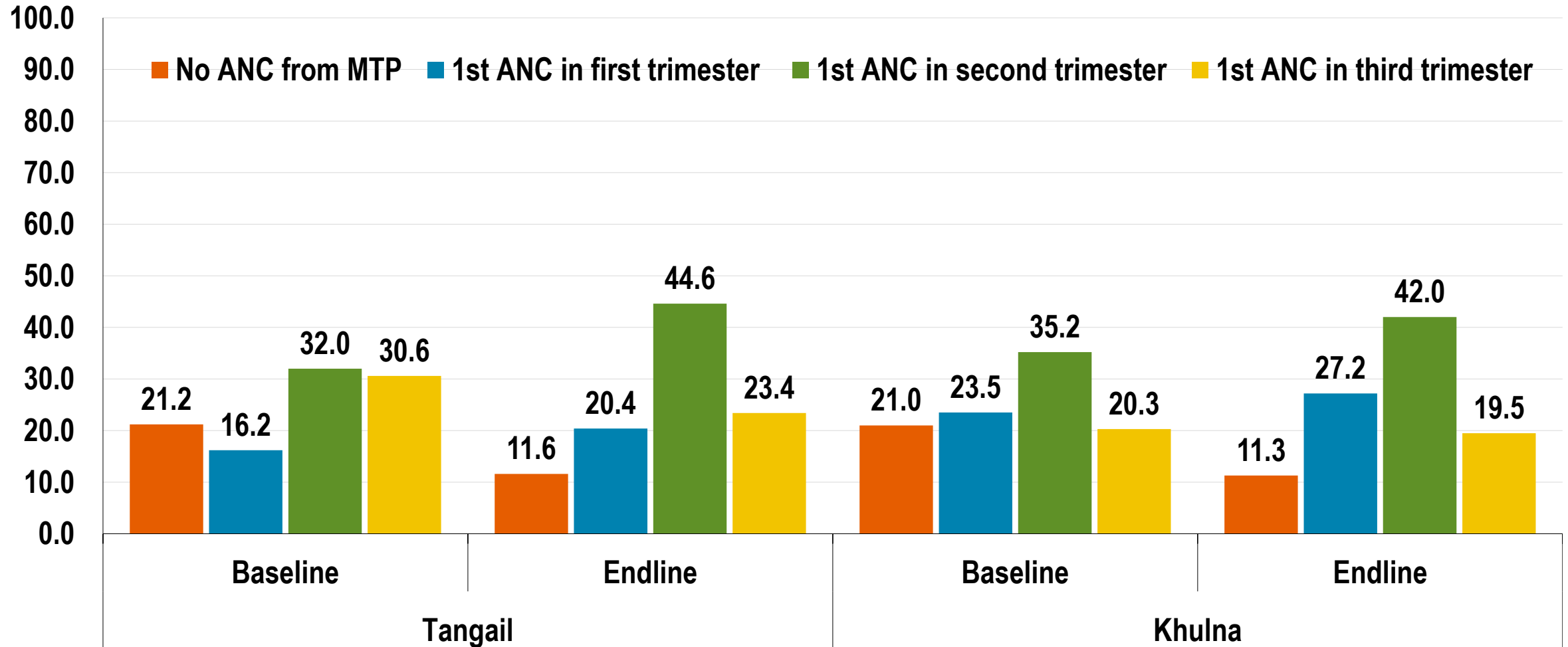


Khulna

Nationally at least 4 ANC visits: BDHS2014 31.2%

Timing of first ANC visit to a medically trained provider

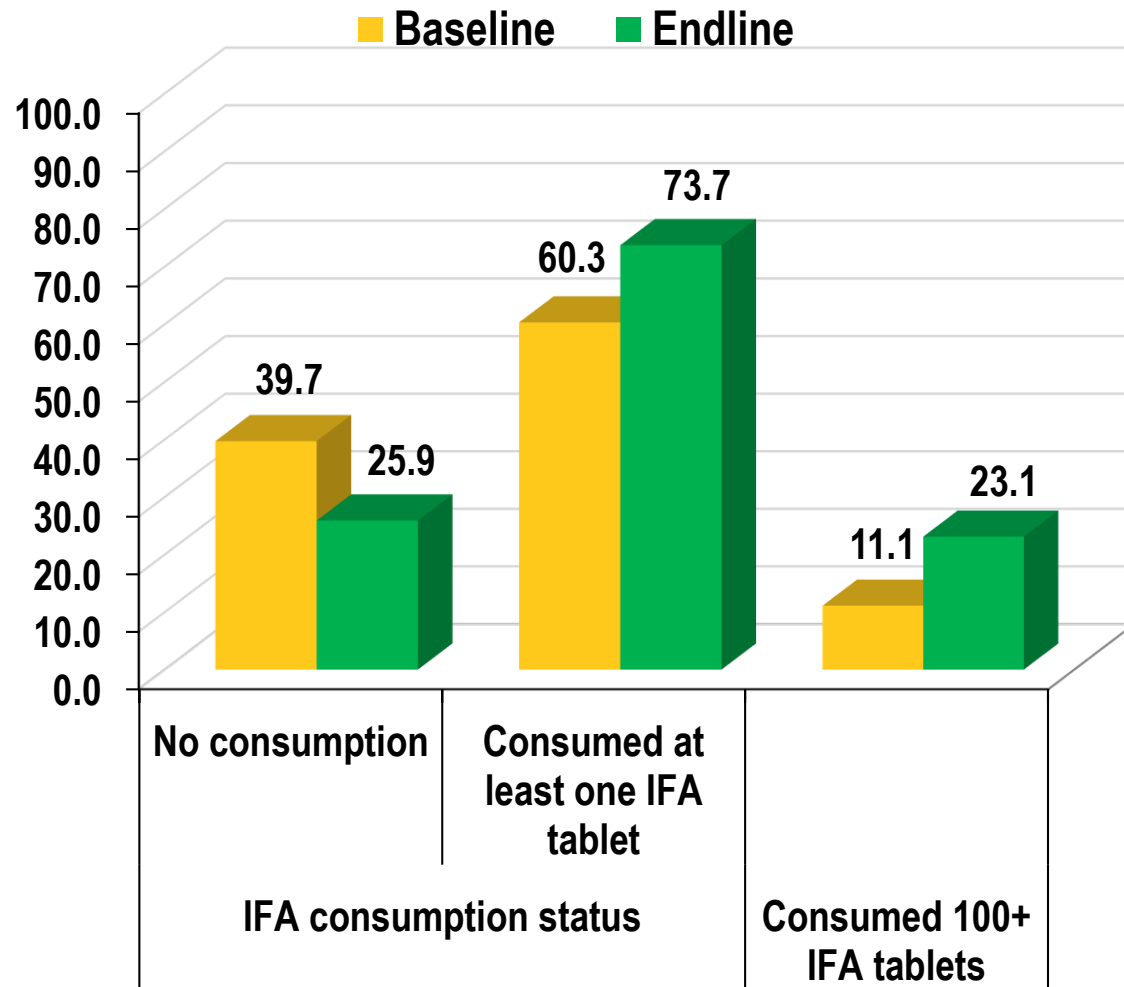
Antenatal Care



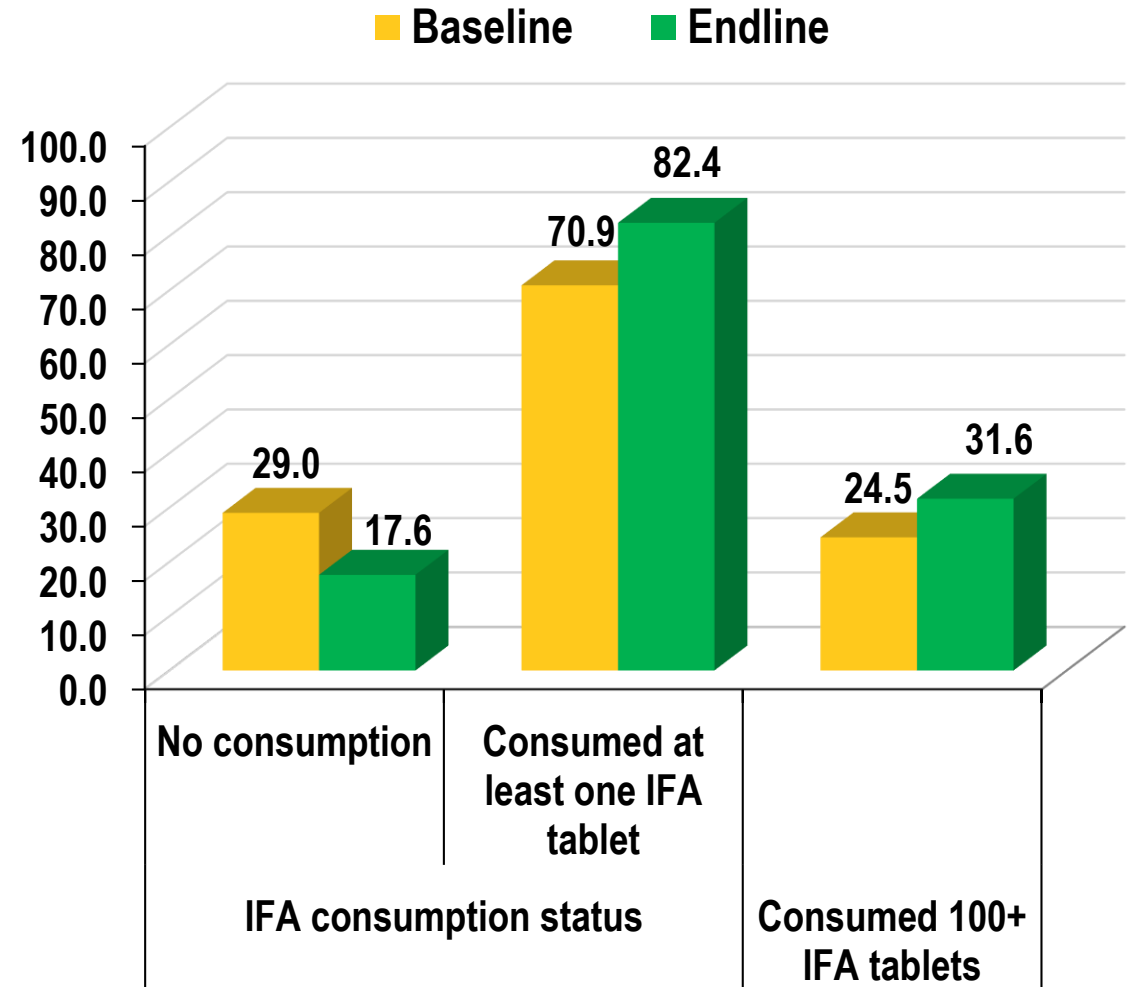
Findings: ANC visit in 1st trimester: Tangail- BL: 16.2% EL: 20.4%, Khulna- BL: 23.5% , EL 27.2%

Consumption of Iron-Folate Acid (IFA) supplementation

Antenatal Care



Tangail

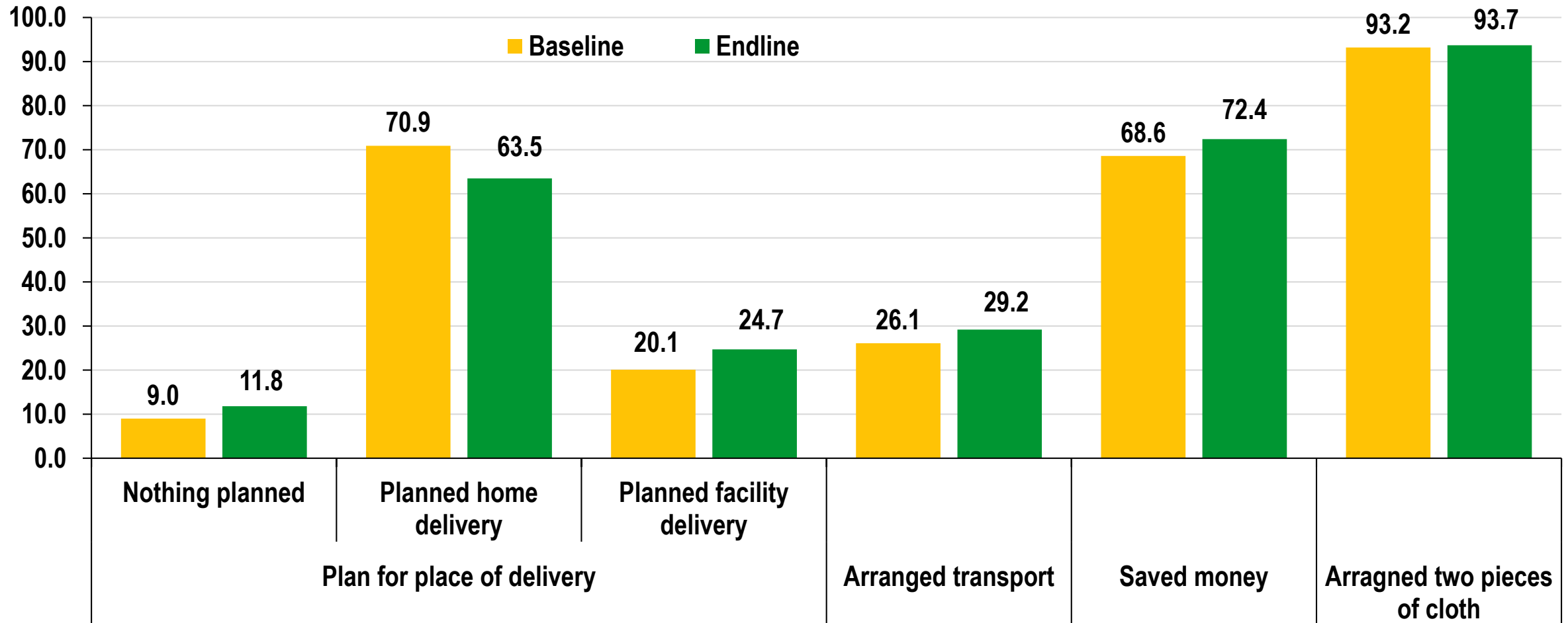


Khulna

Birth preparedness by prior planning for last delivery

Antenatal Care

Tangail

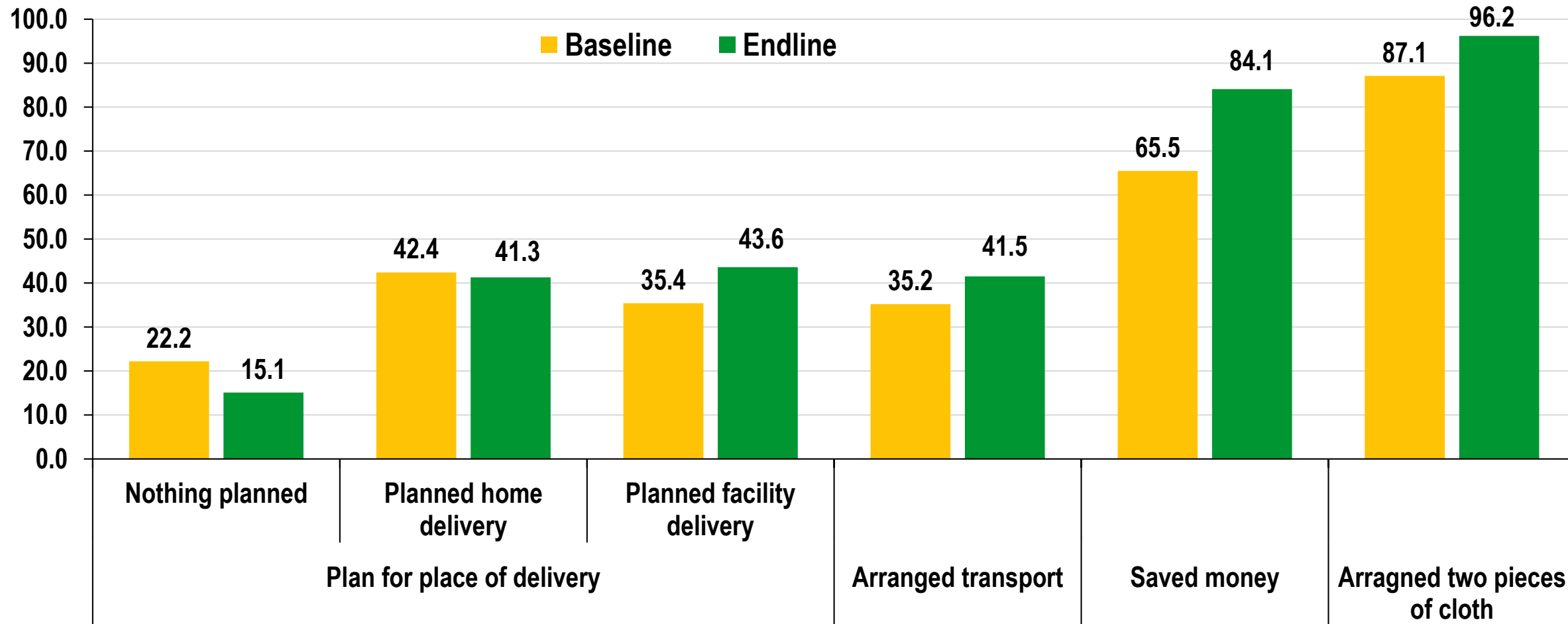


Findings: Planned for home: National (BDHS-2014- 62%)

Birth preparedness by prior planning for last delivery

Antenatal Care

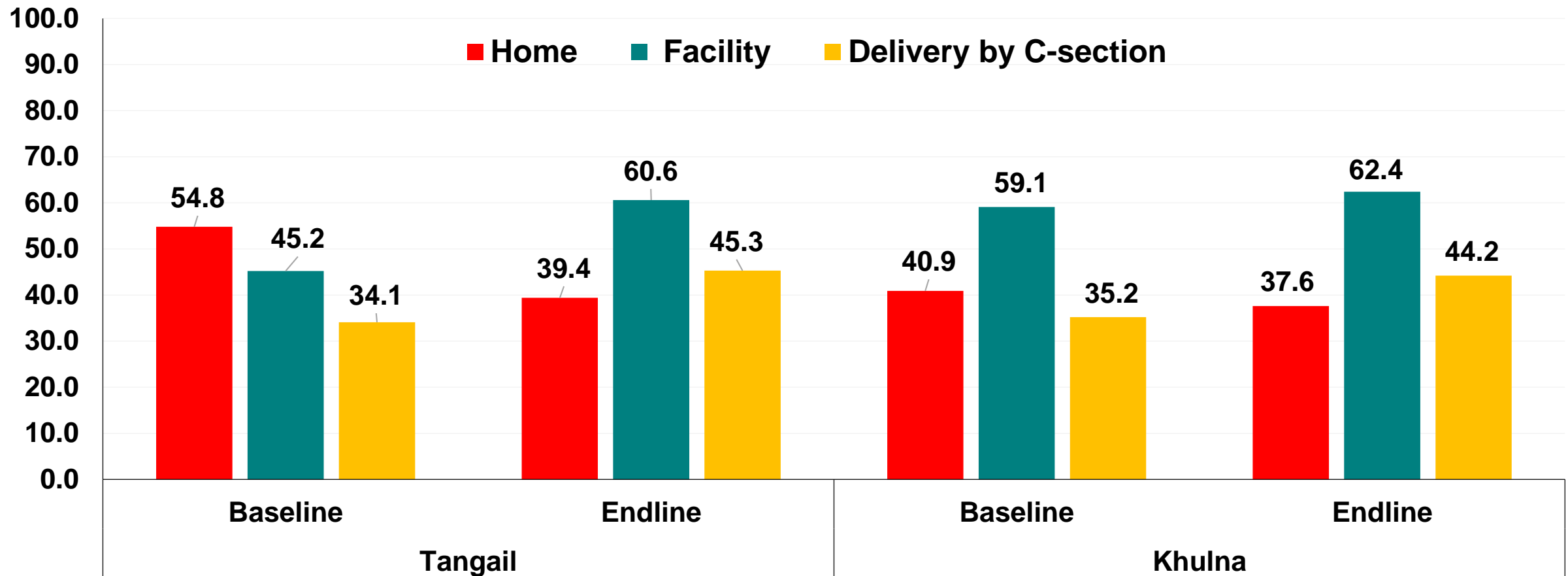
Khulna



Findings: Planned for home: National (BDHS-2014- 62%)

Place of last delivery in two years preceding the survey

Delivery Care



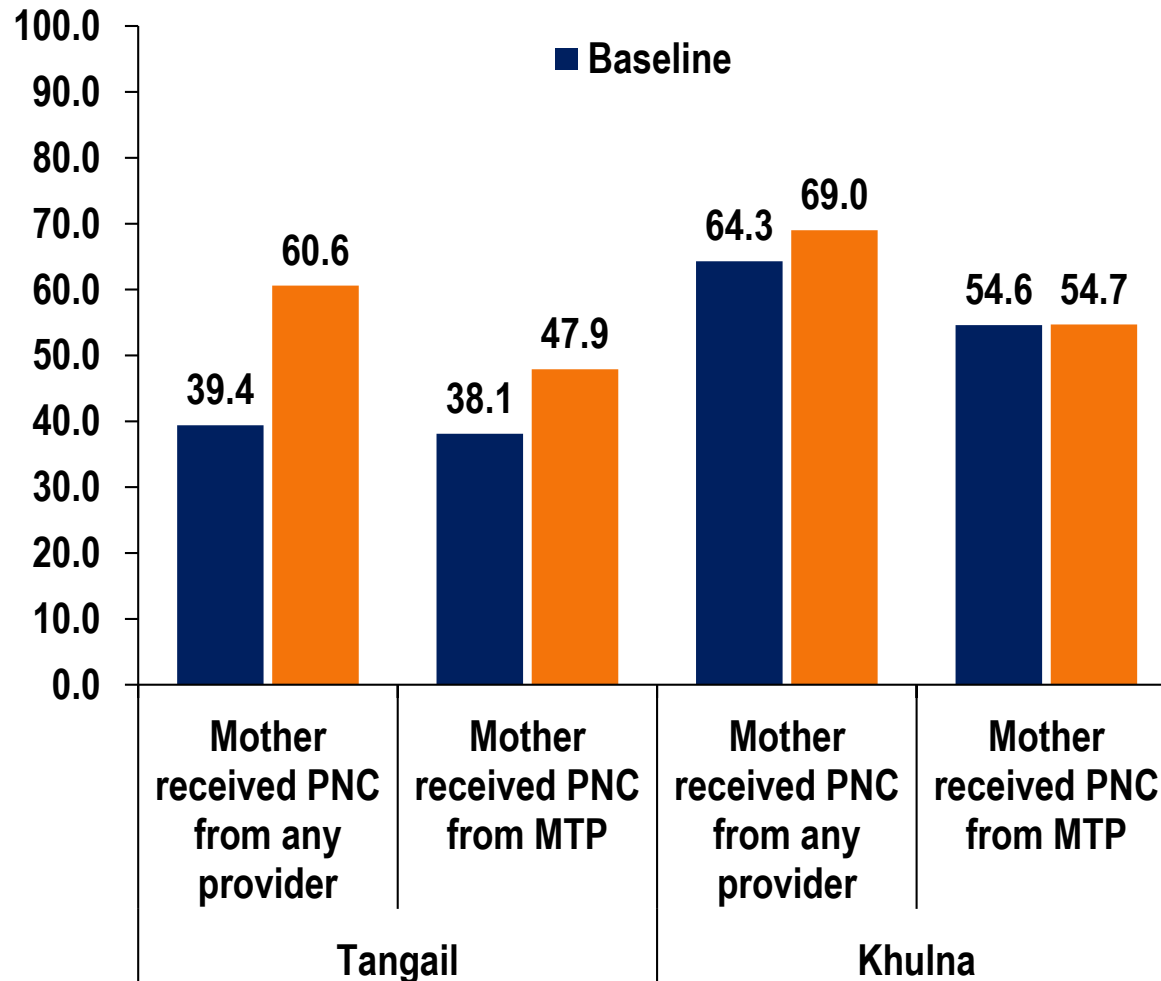
Facility delivery includes public, private and NGO-run facilities

Findings: facility delivery higher in khulna (BL:59.1% and EL: 62.4%) than in Tangail (BL: 45.2% and EL: 60.6%) (BDHS-2014- 37.4%)

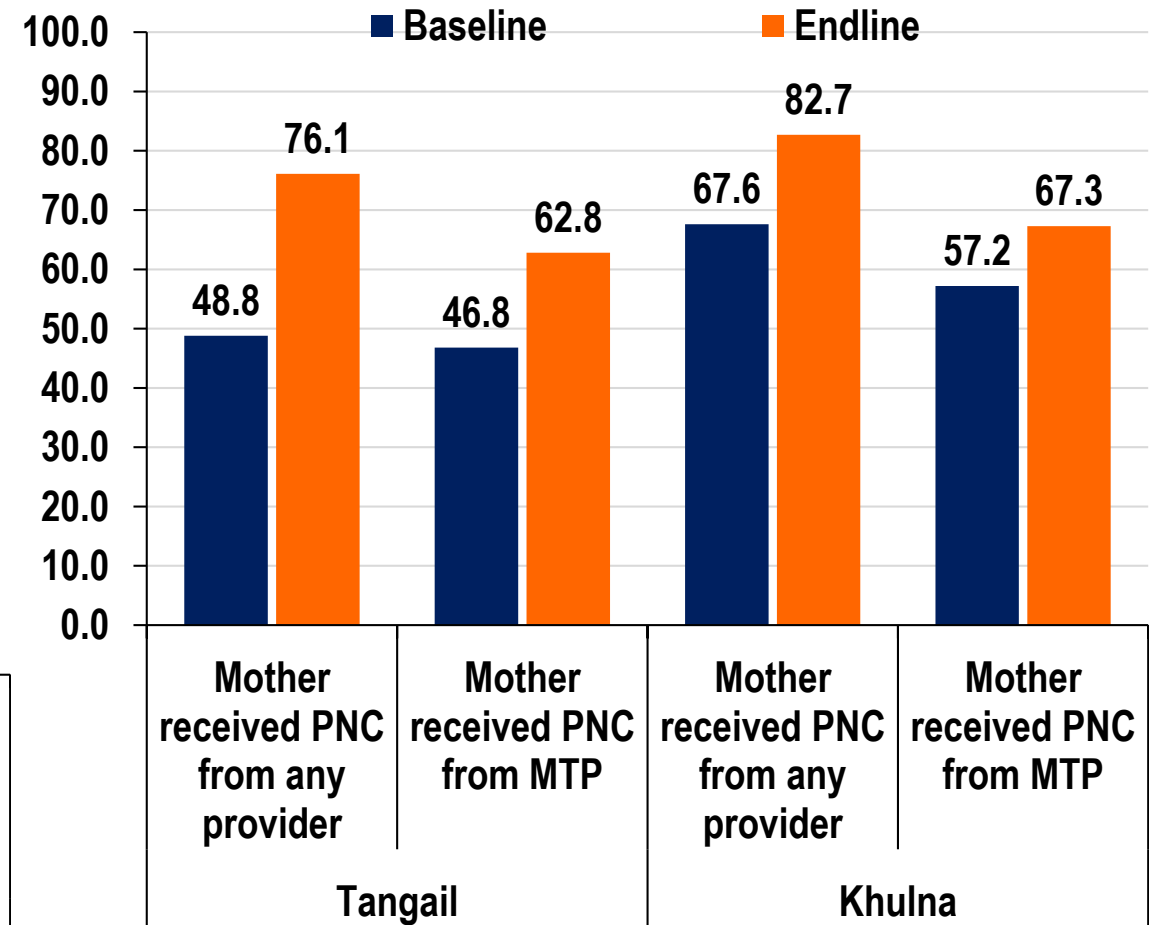
Postnatal care for mothers

Postnatal care

Within 2 days of birth



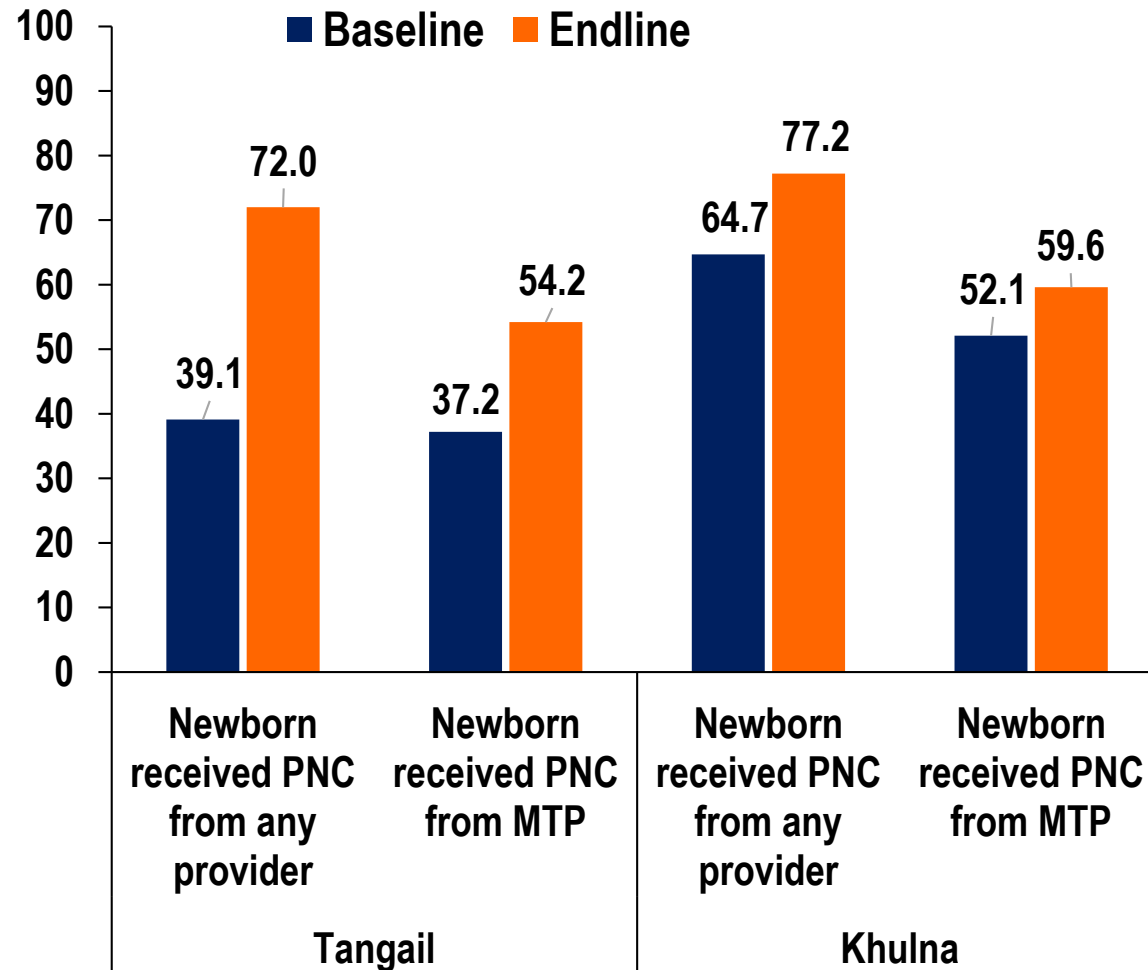
Within 42 days of birth



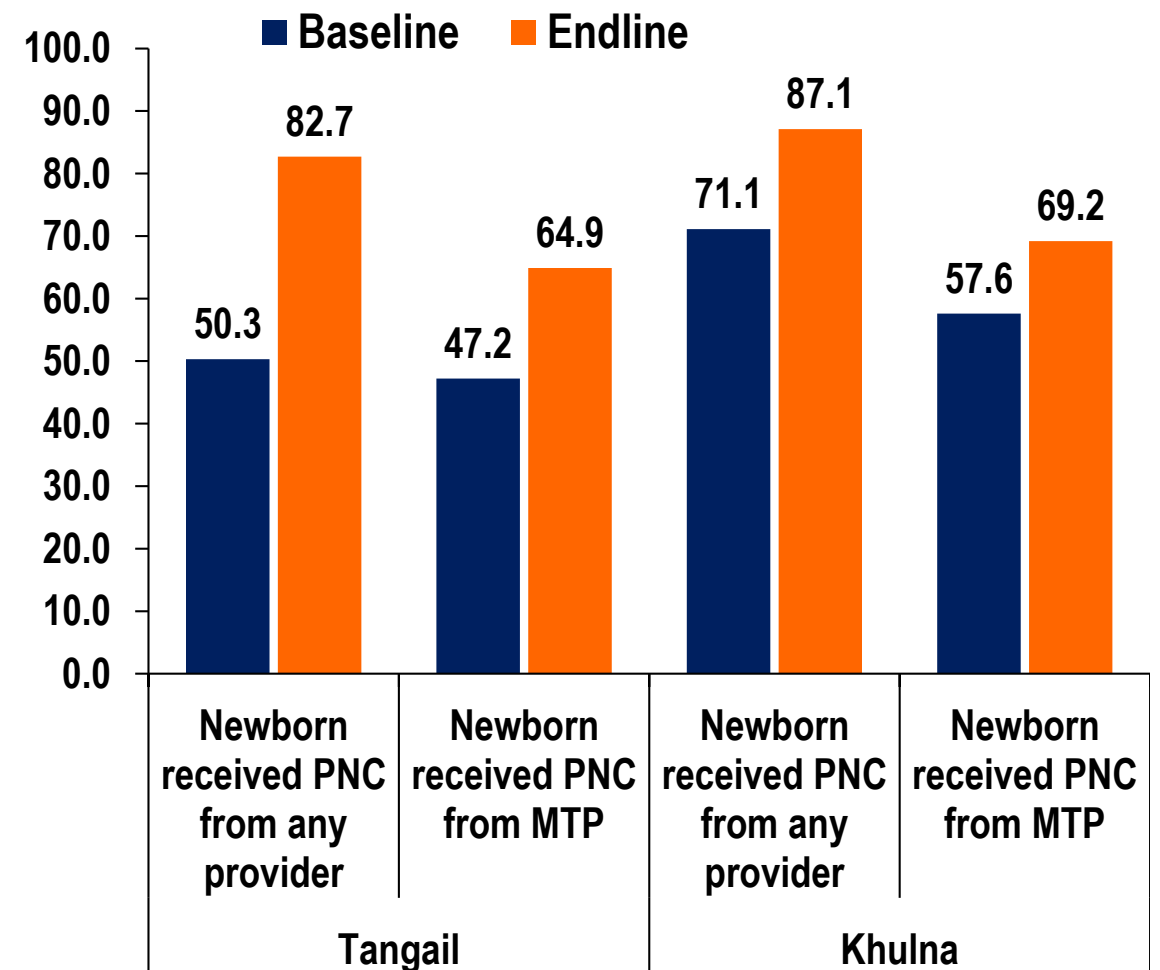
Postnatal care for children

Postnatal care

Within 2 days of birth

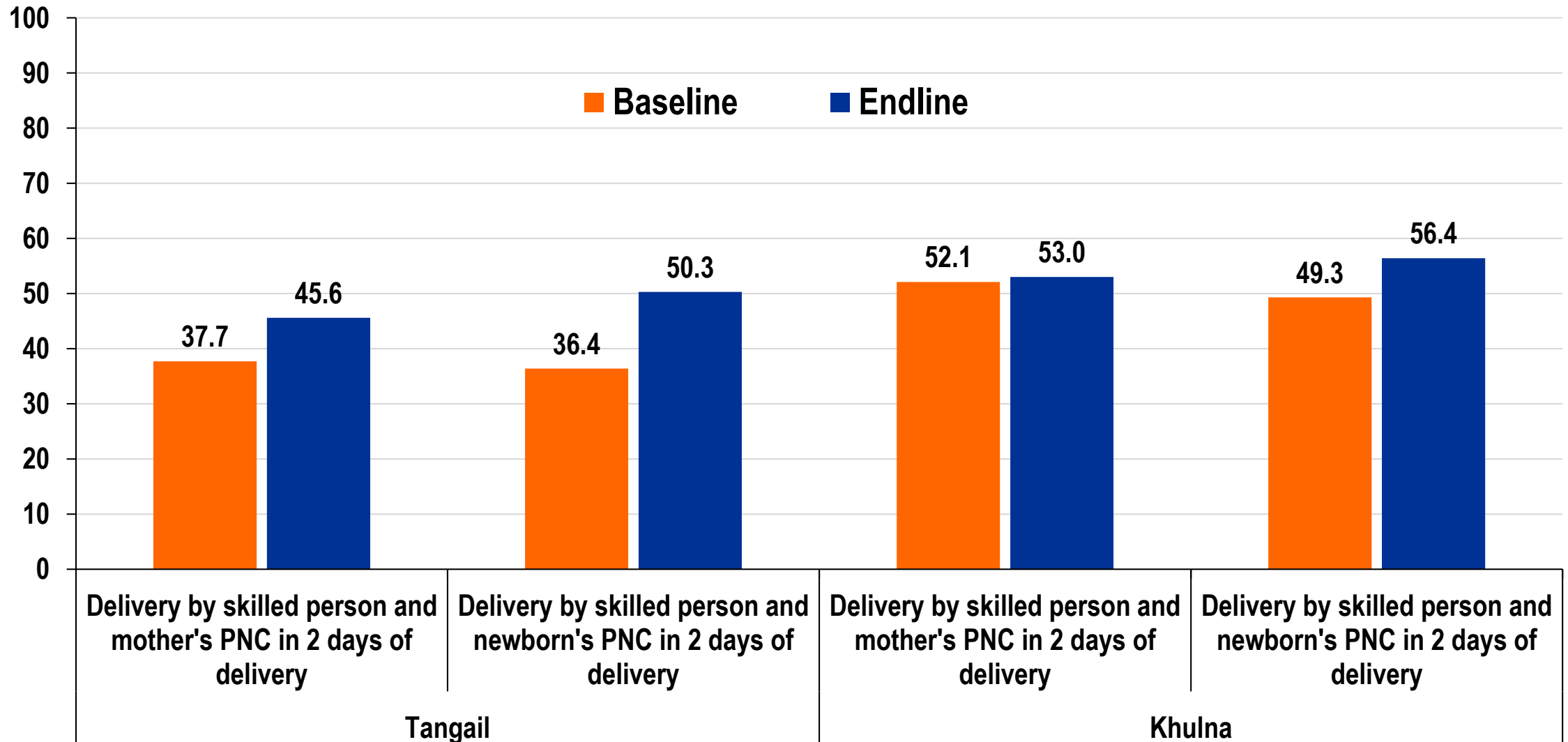


Within 42 days of birth



Delivery by skilled person with PNC within 2 days after birth

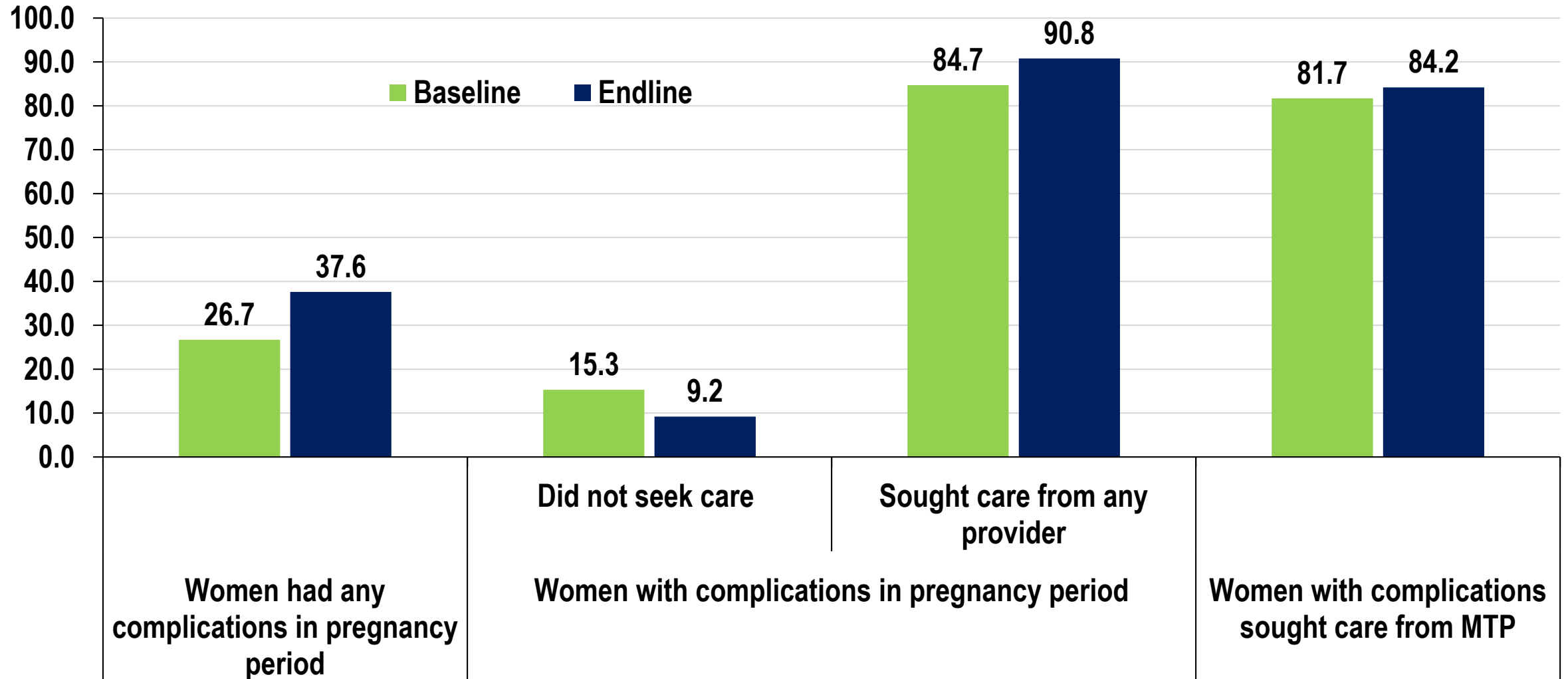
Postnatal care



Complications during ANC (pregnancy) period and care seeking behaviour

Complications

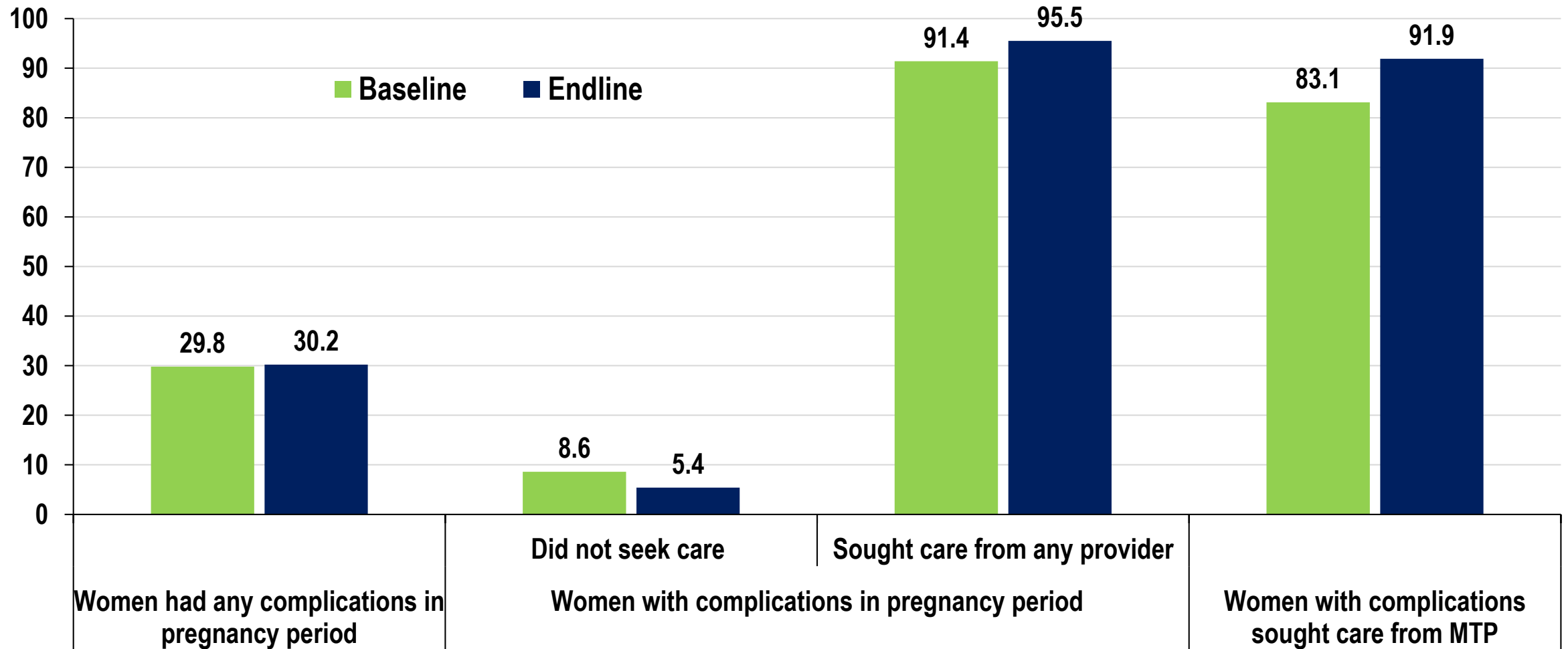
Tangail



Complications during ANC (pregnancy) period and care seeking behaviour

Complications

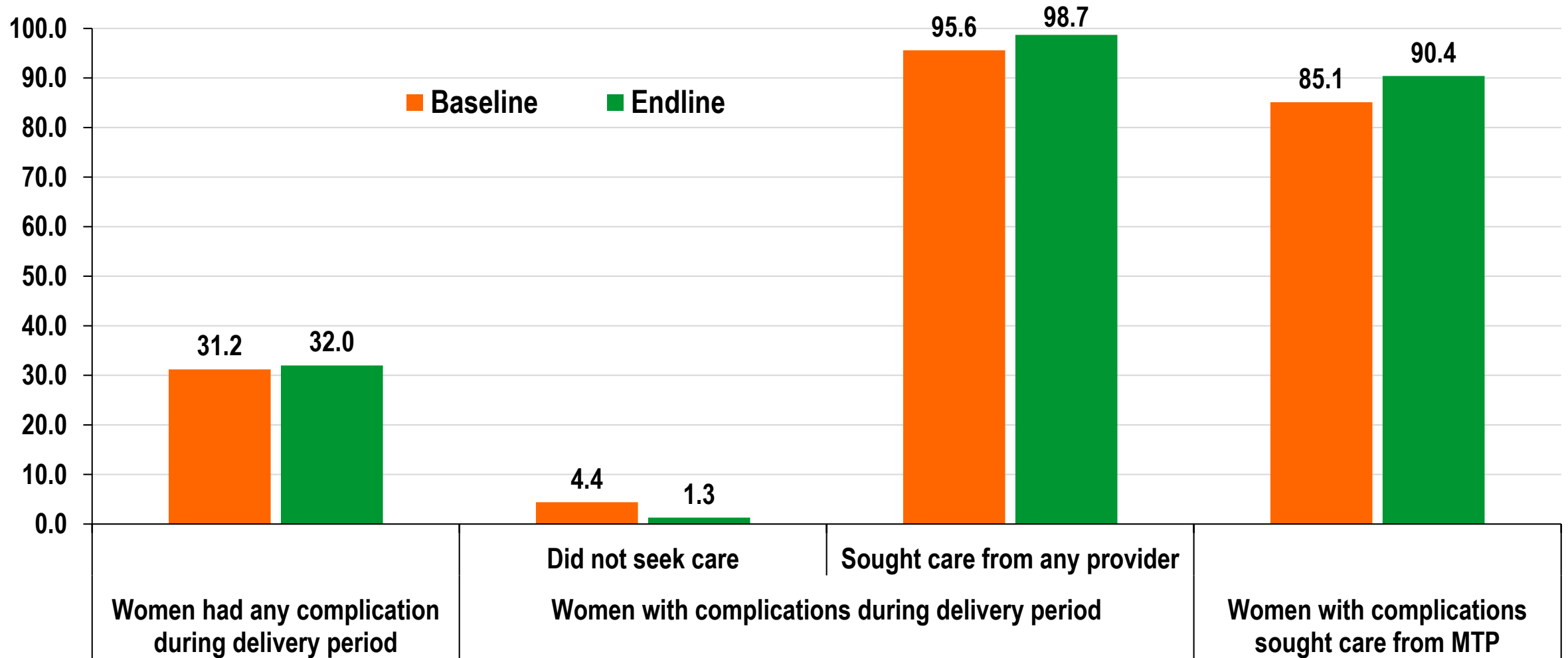
Khulna



Complications during delivery and care seeking behavior

Complications

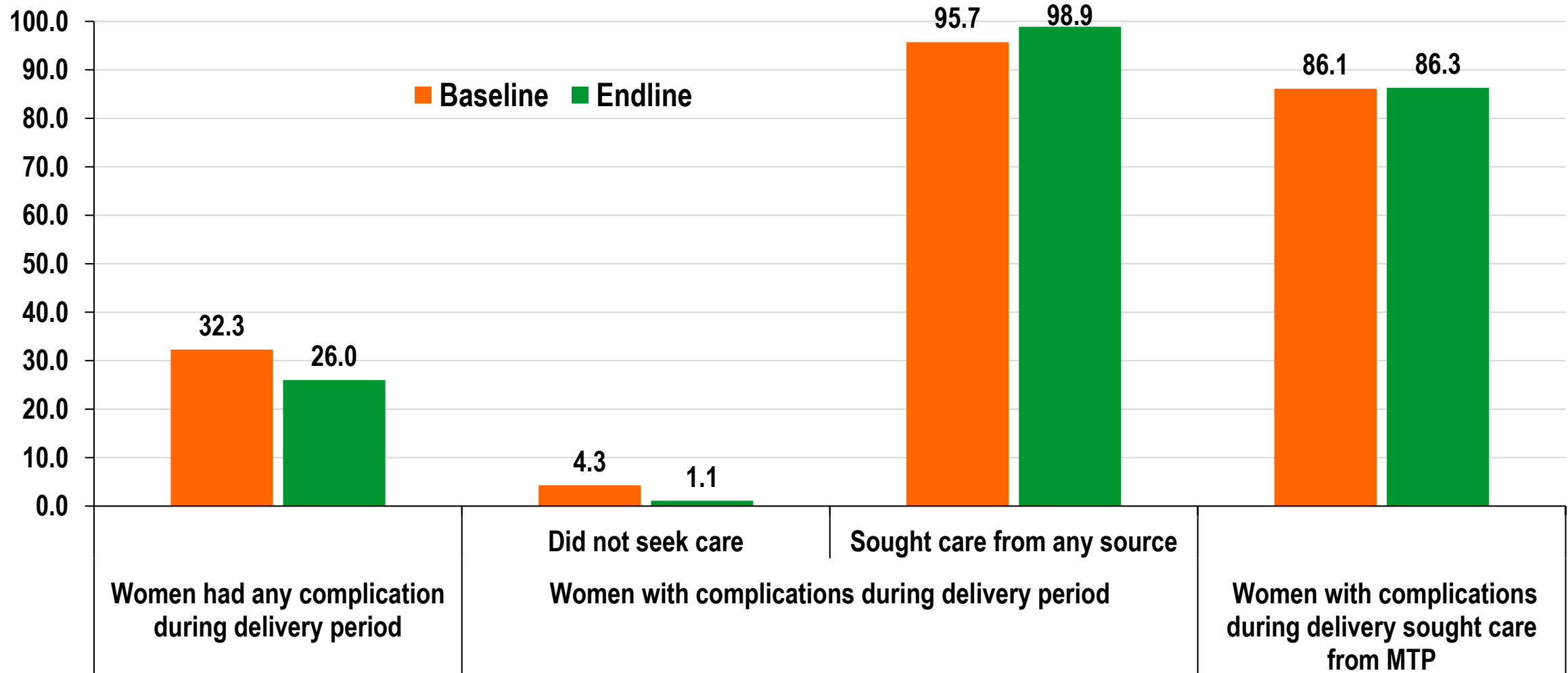
Tangail



Complications during delivery and care seeking behavior

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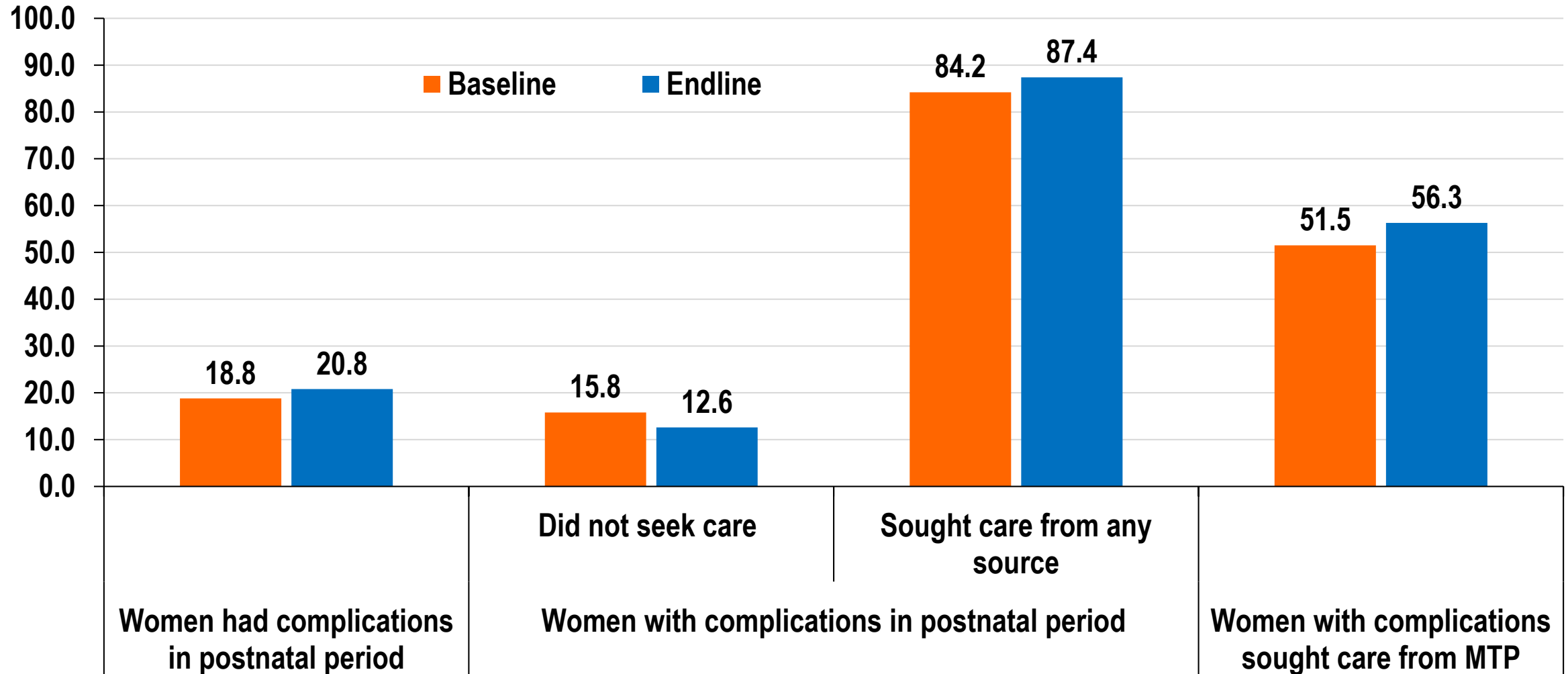
Khulna



Complications after delivery and care seeking behavior

Complications

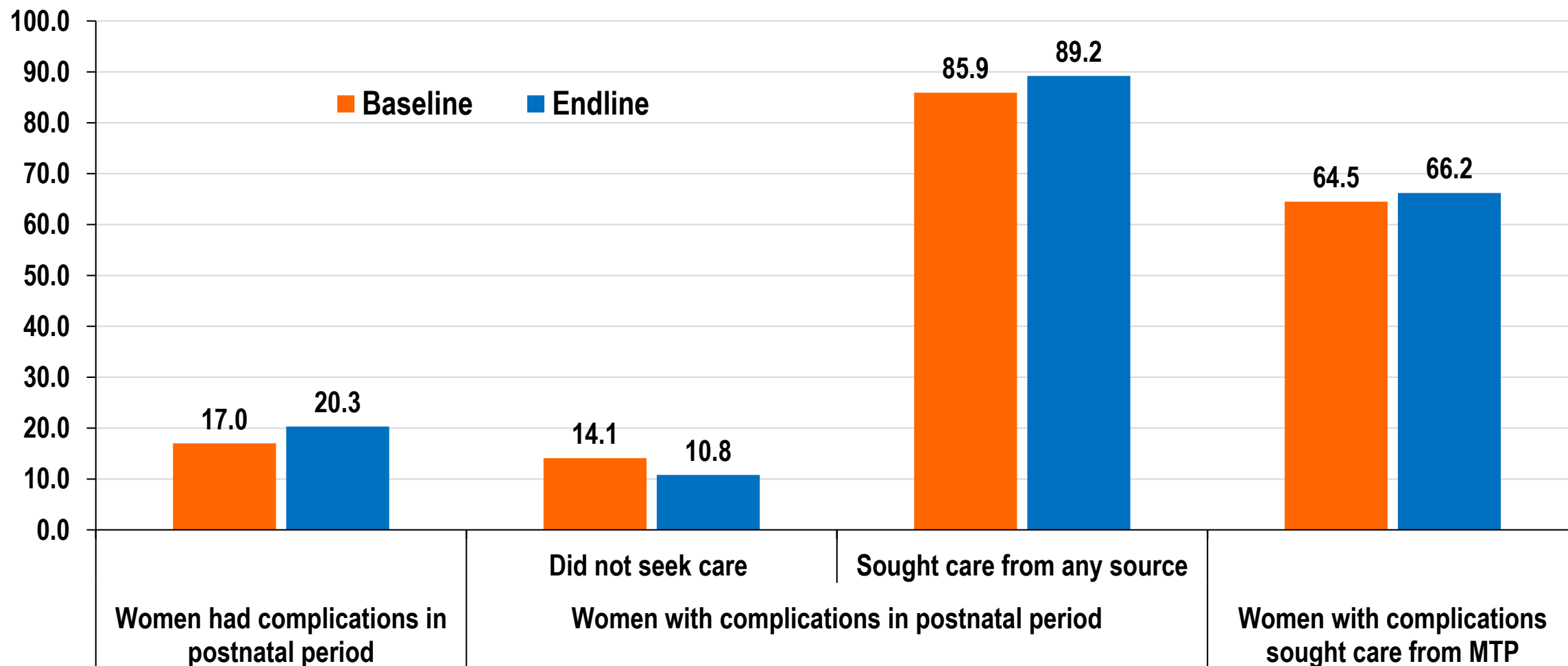
Tangail



Complications after delivery and care seeking behavior

Complications

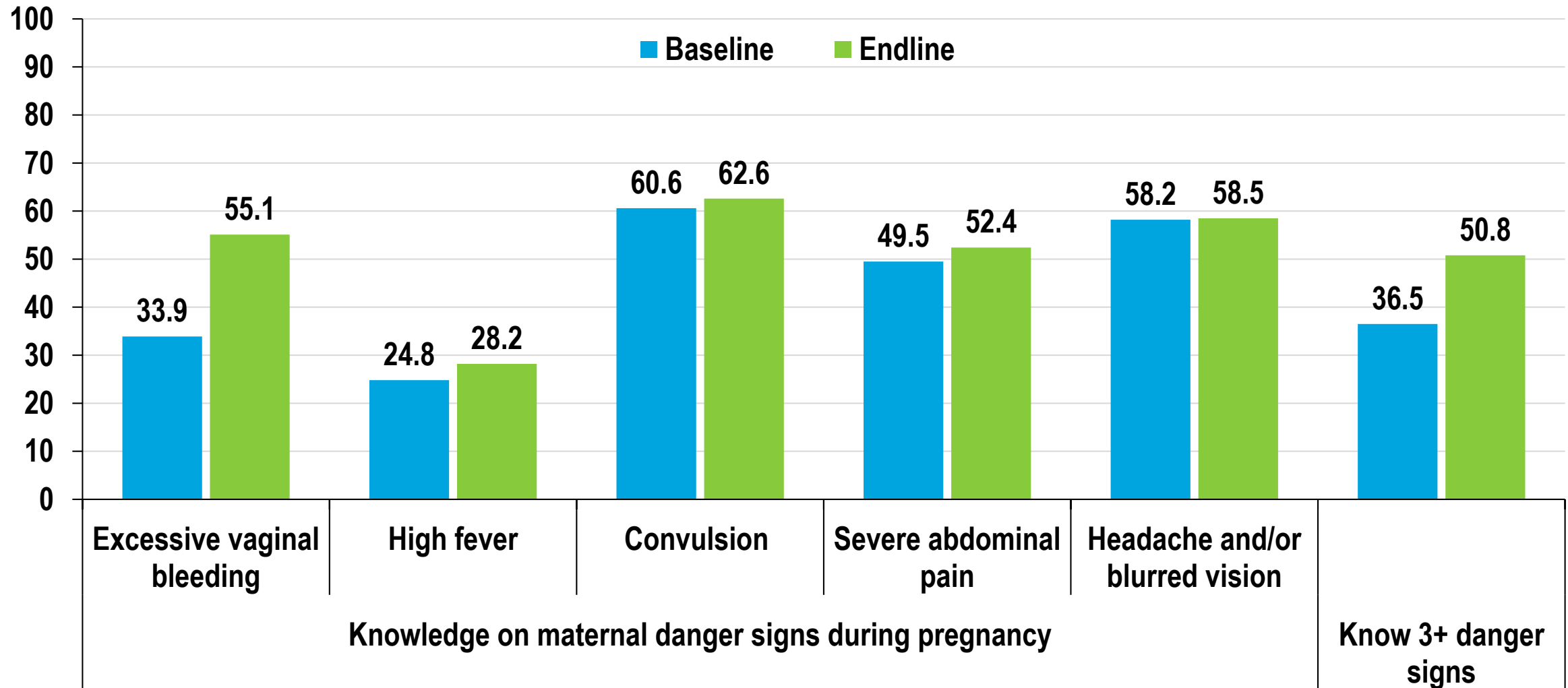
Khulna



Knowledge on maternal danger signs during pregnancy

Danger sign
Knowledge

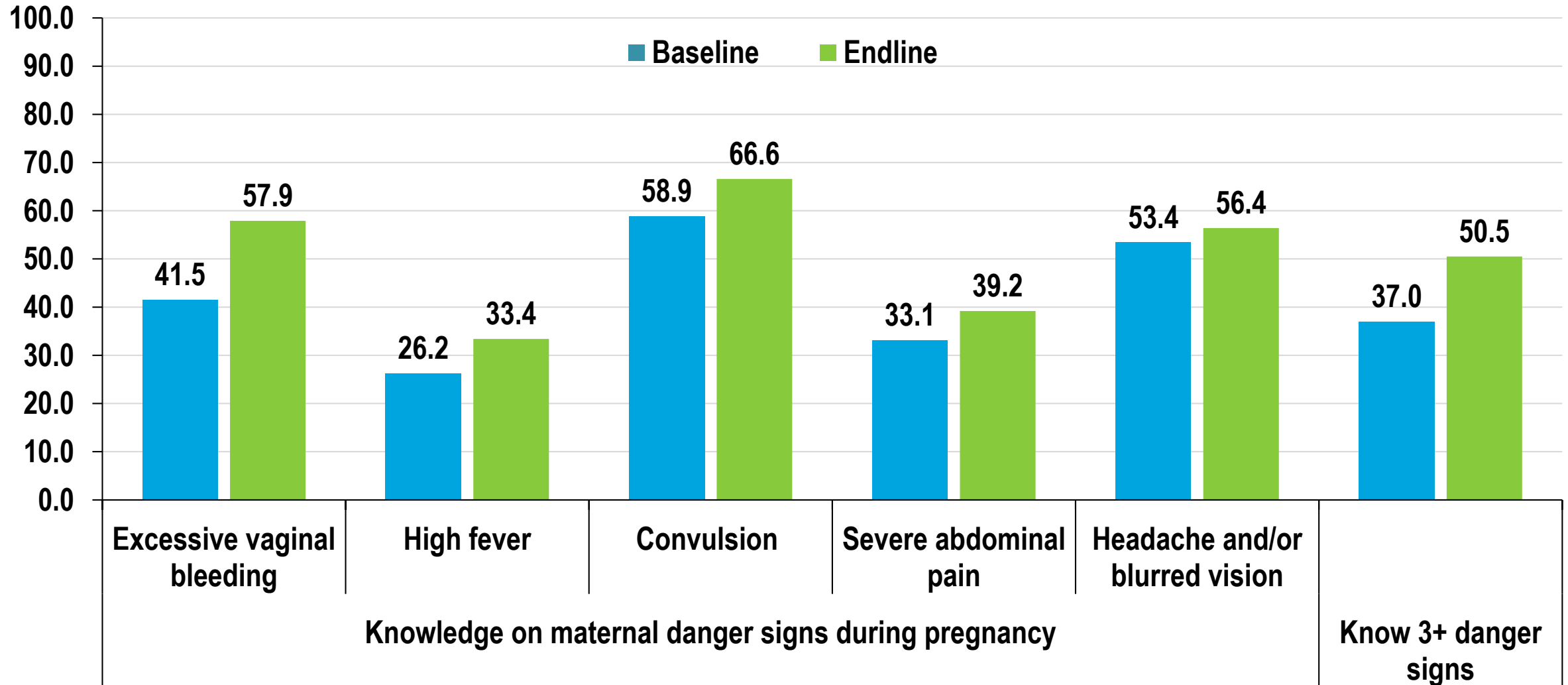
Tangail



Knowledge on maternal danger signs during pregnancy

Danger sign
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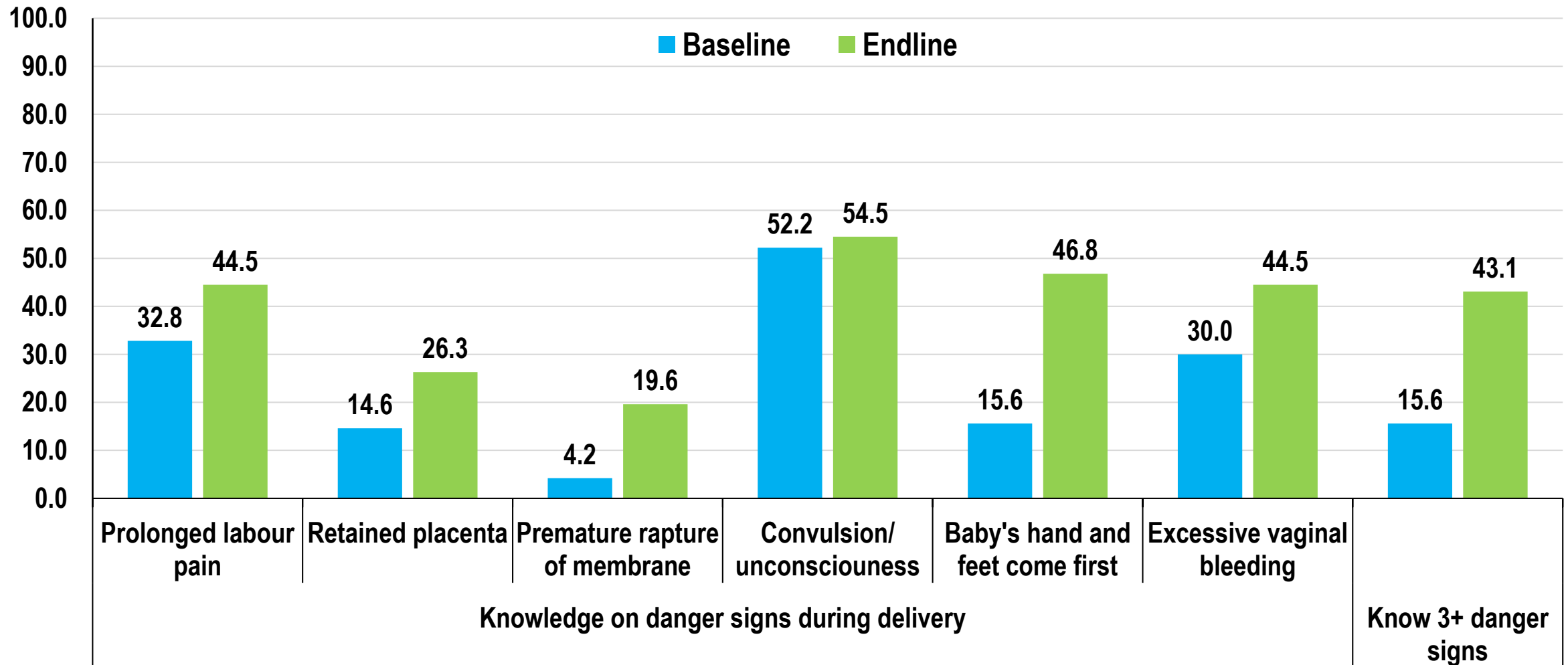
Khulna



Knowledge on danger signs during delivery time

Danger sign
Knowledge

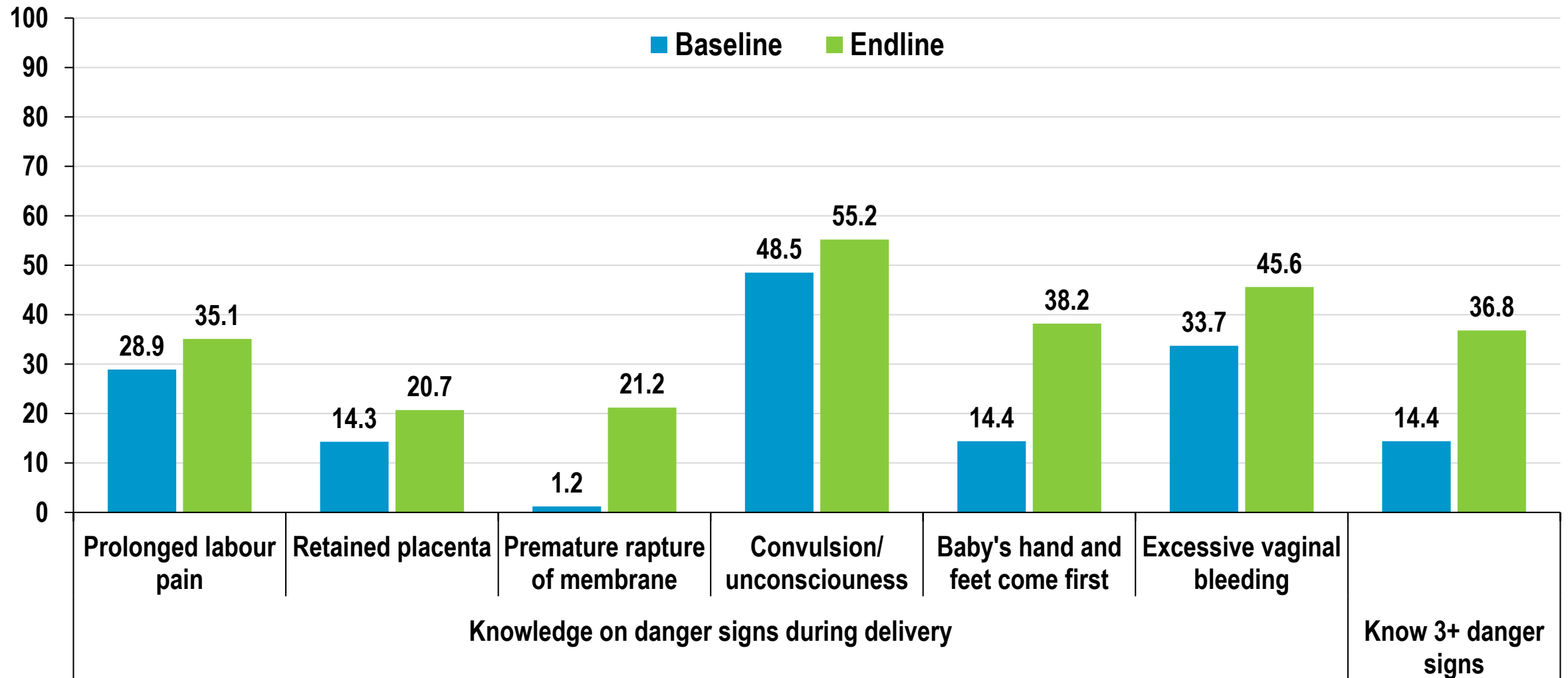
Tangail



Knowledge on danger signs during delivery time

Danger sign
Knowledge

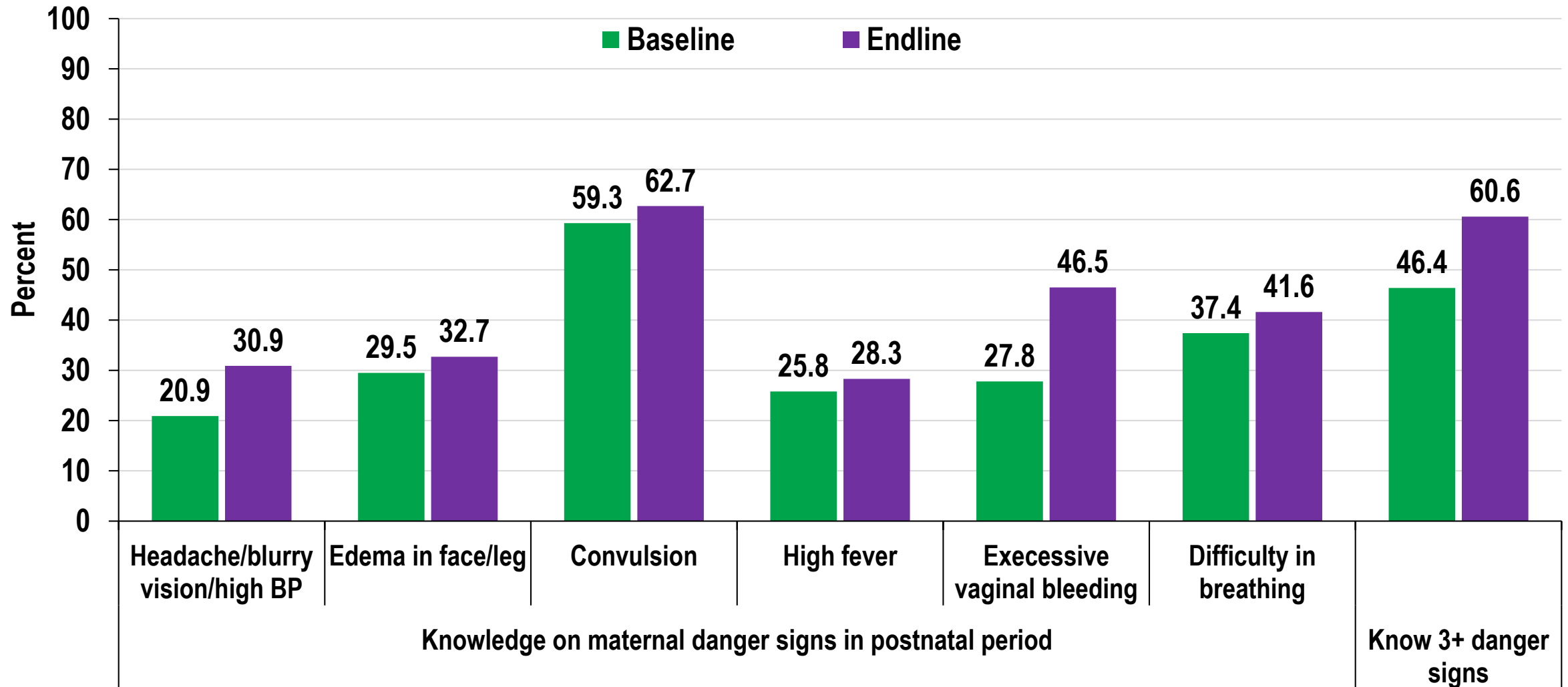
Khulna



Knowledge on maternal danger signs in postnatal period

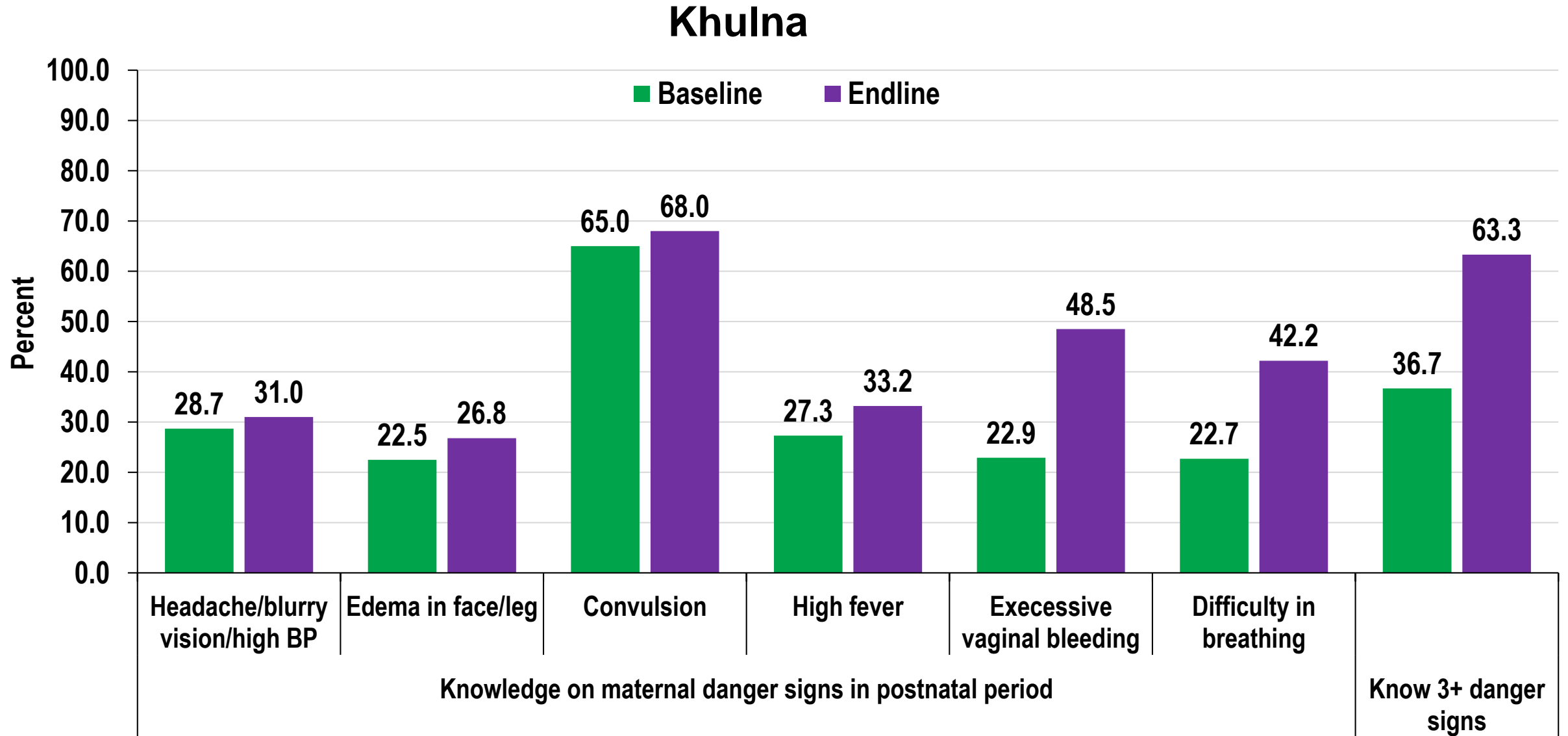
Danger sign
Knowledge

Tangail



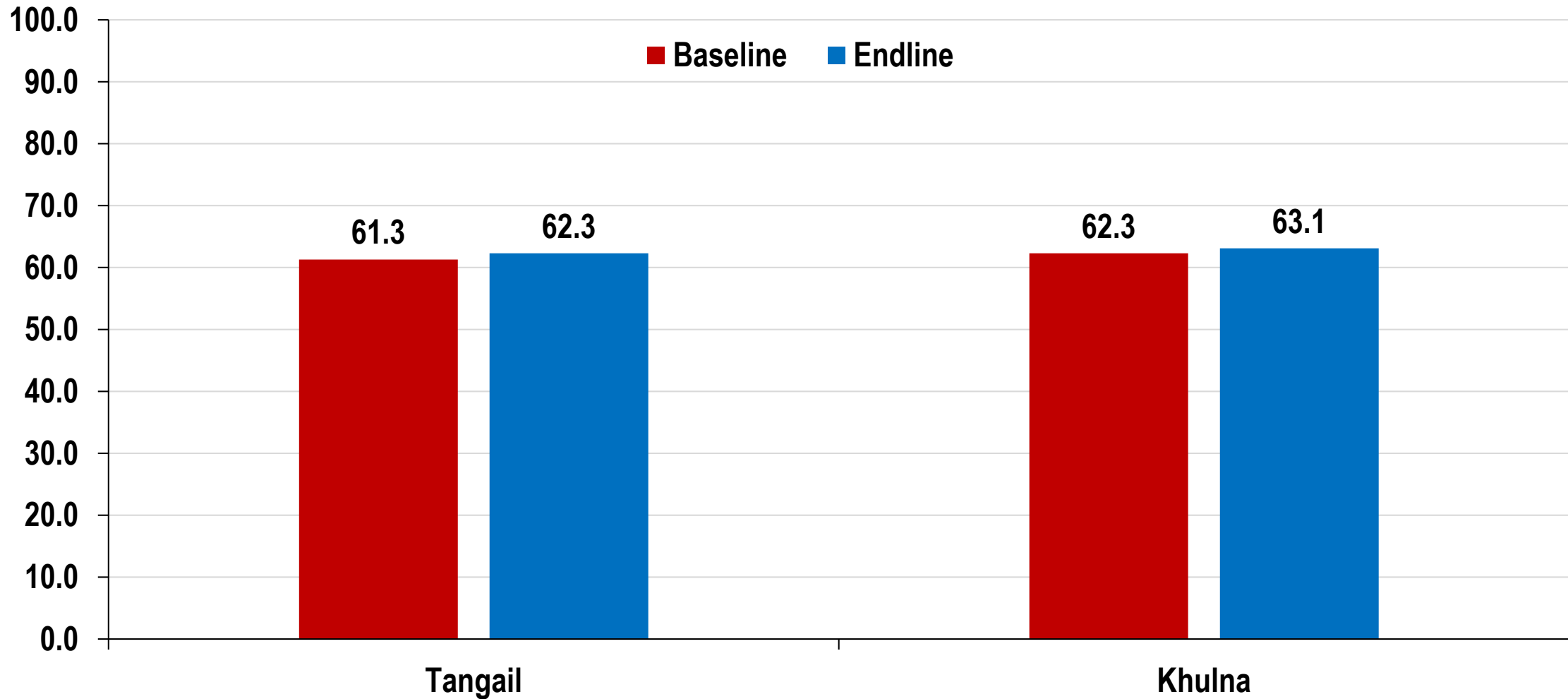
Knowledge on maternal danger signs in postnatal period

Danger sign
Knowledge



Prevalence of post partum family planning among currently non-pregnant women

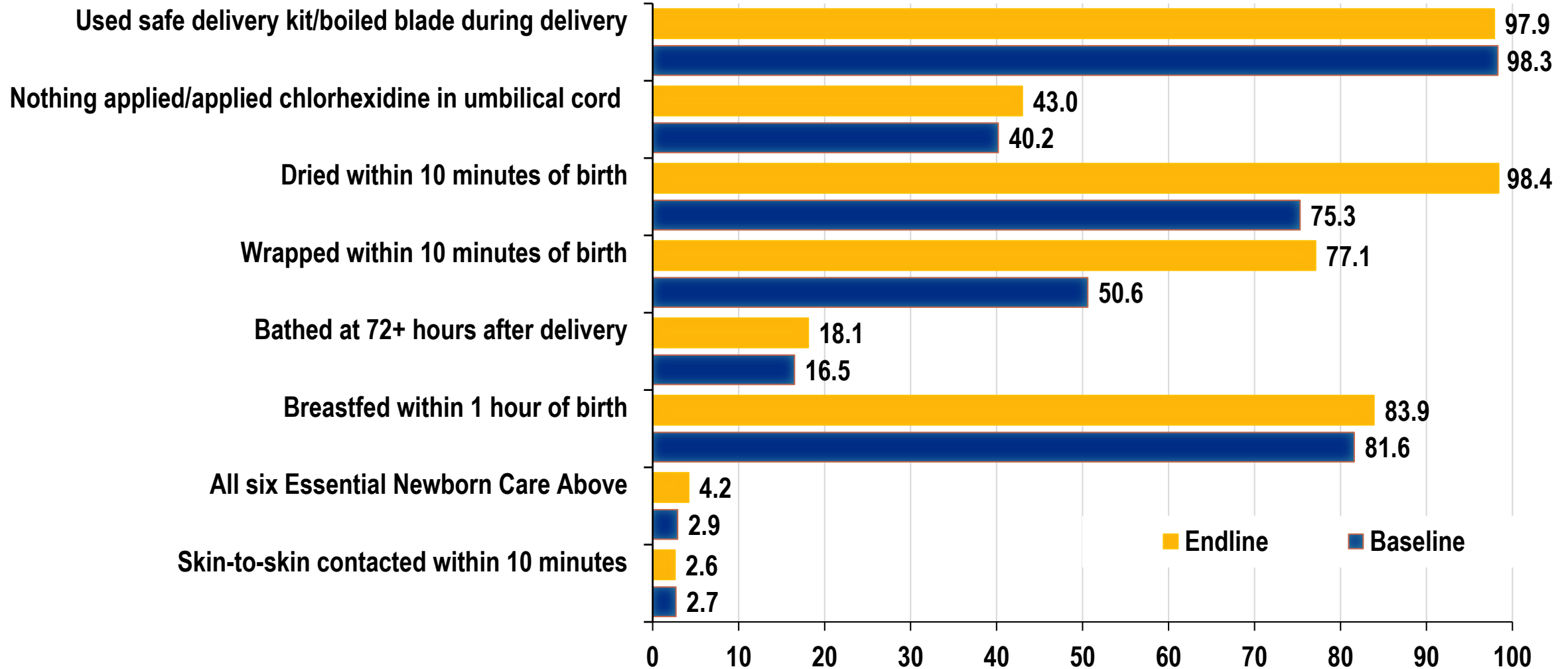
Family planning



Neonatal Healthcare Practices

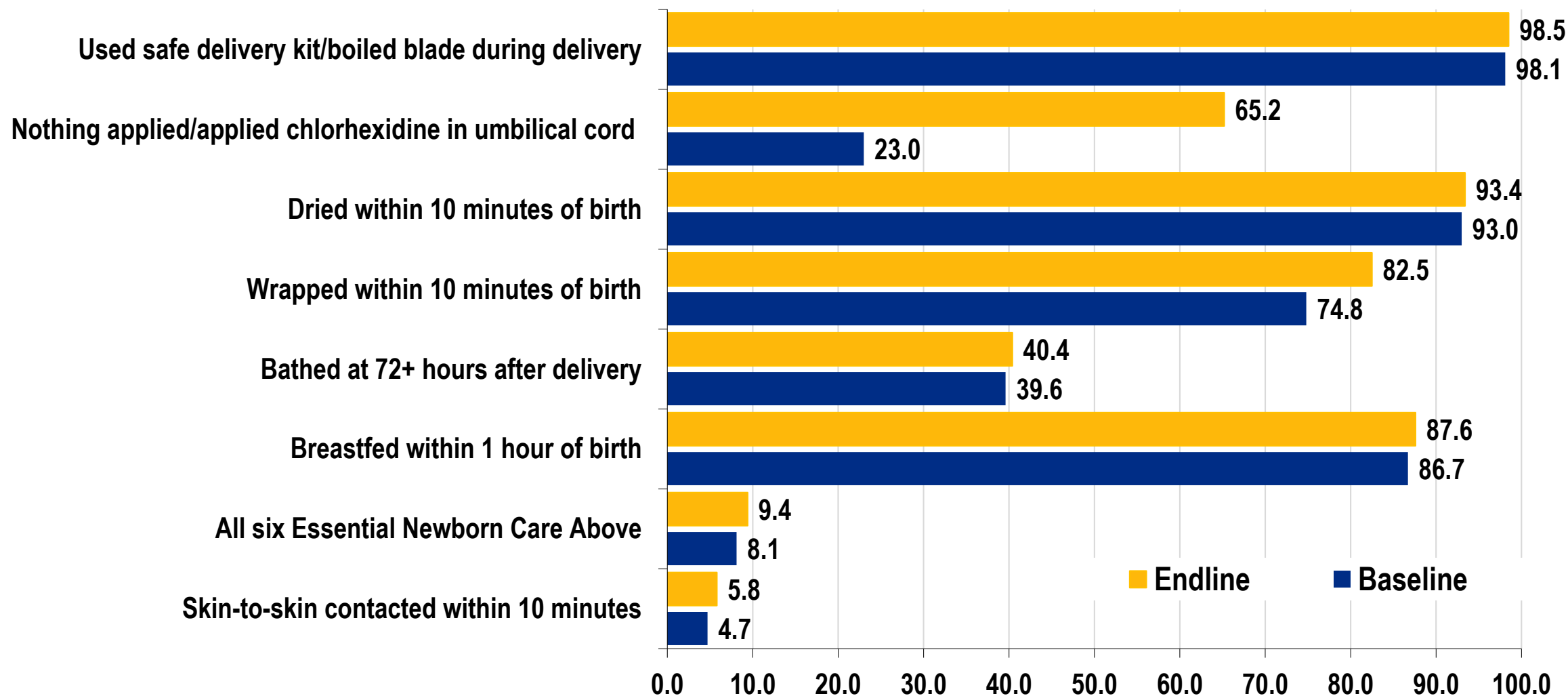
Essential newborn care among non-institutional births

Tangail



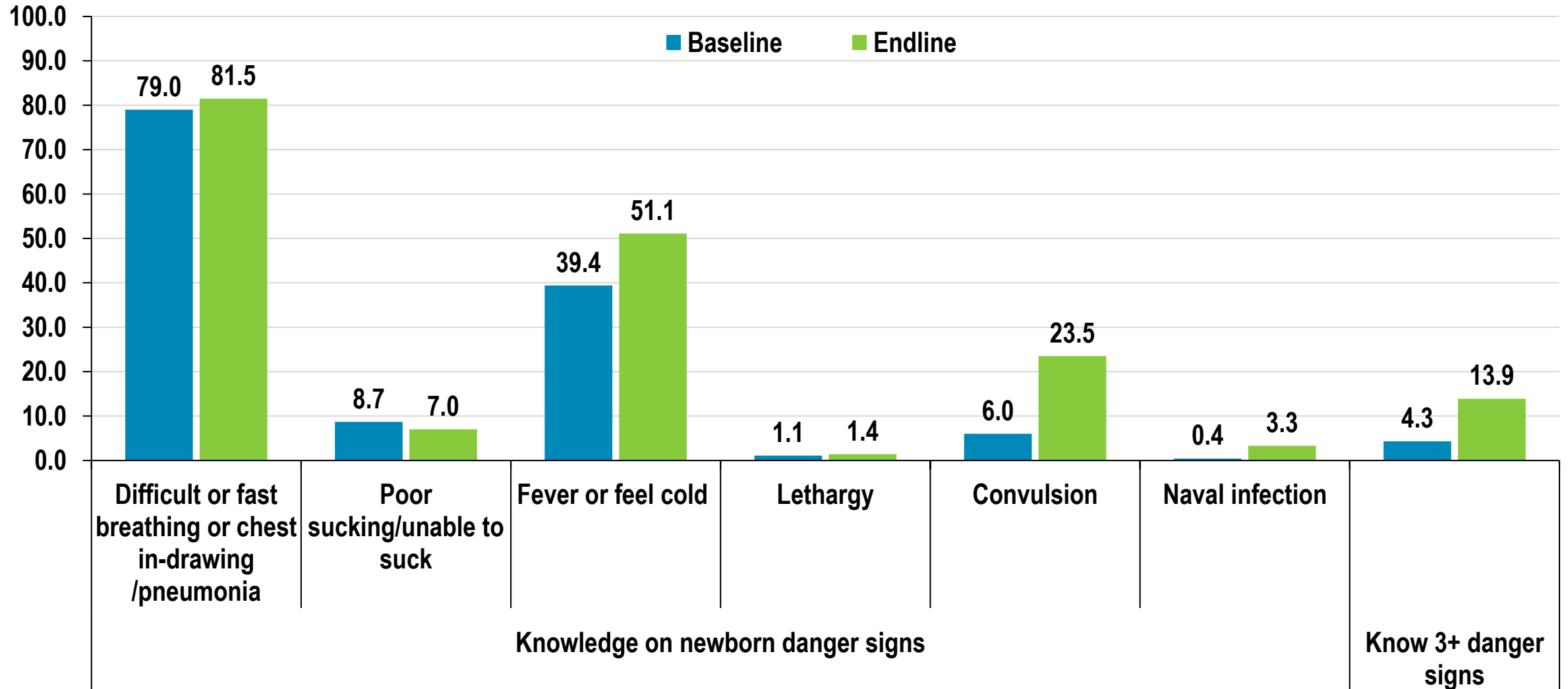
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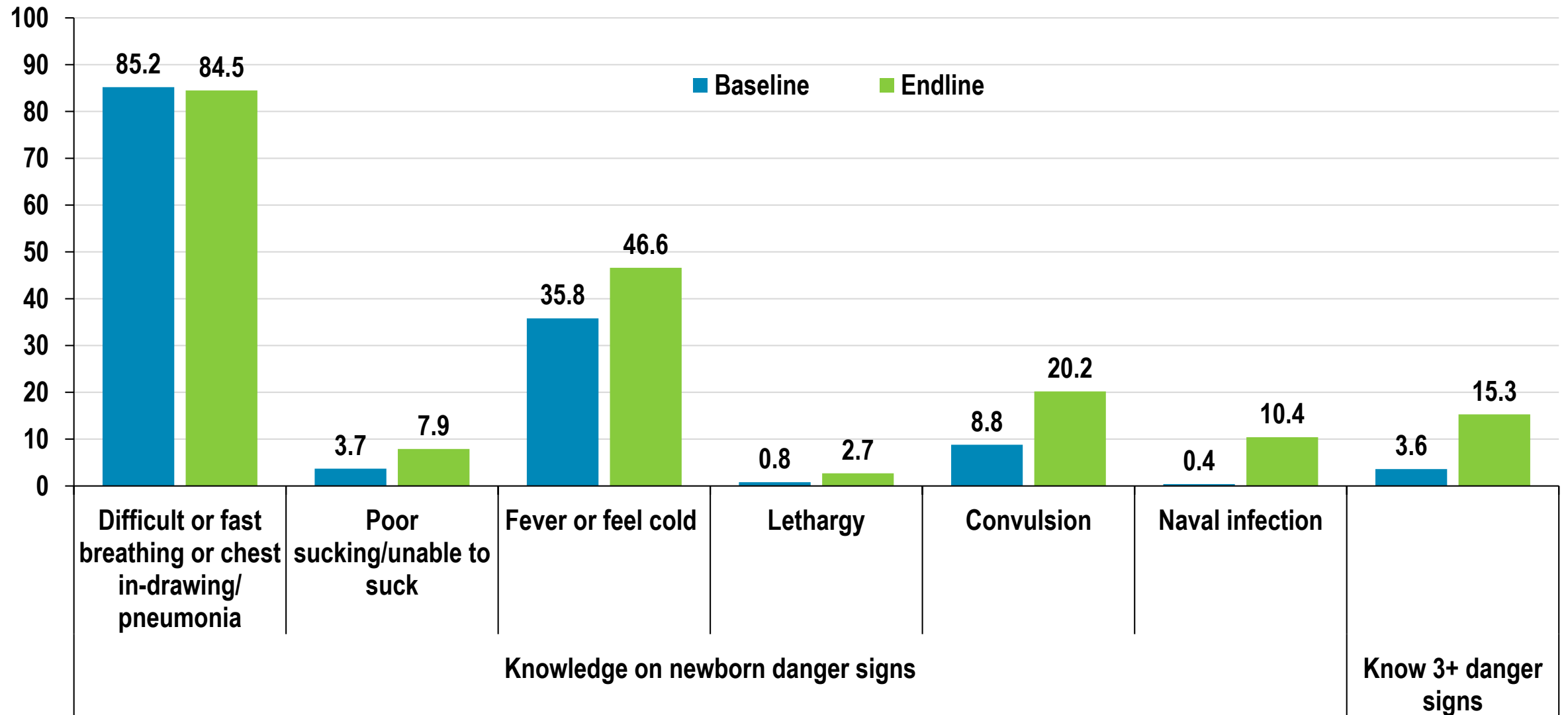
Knowledge on newborn danger signs

Tangail



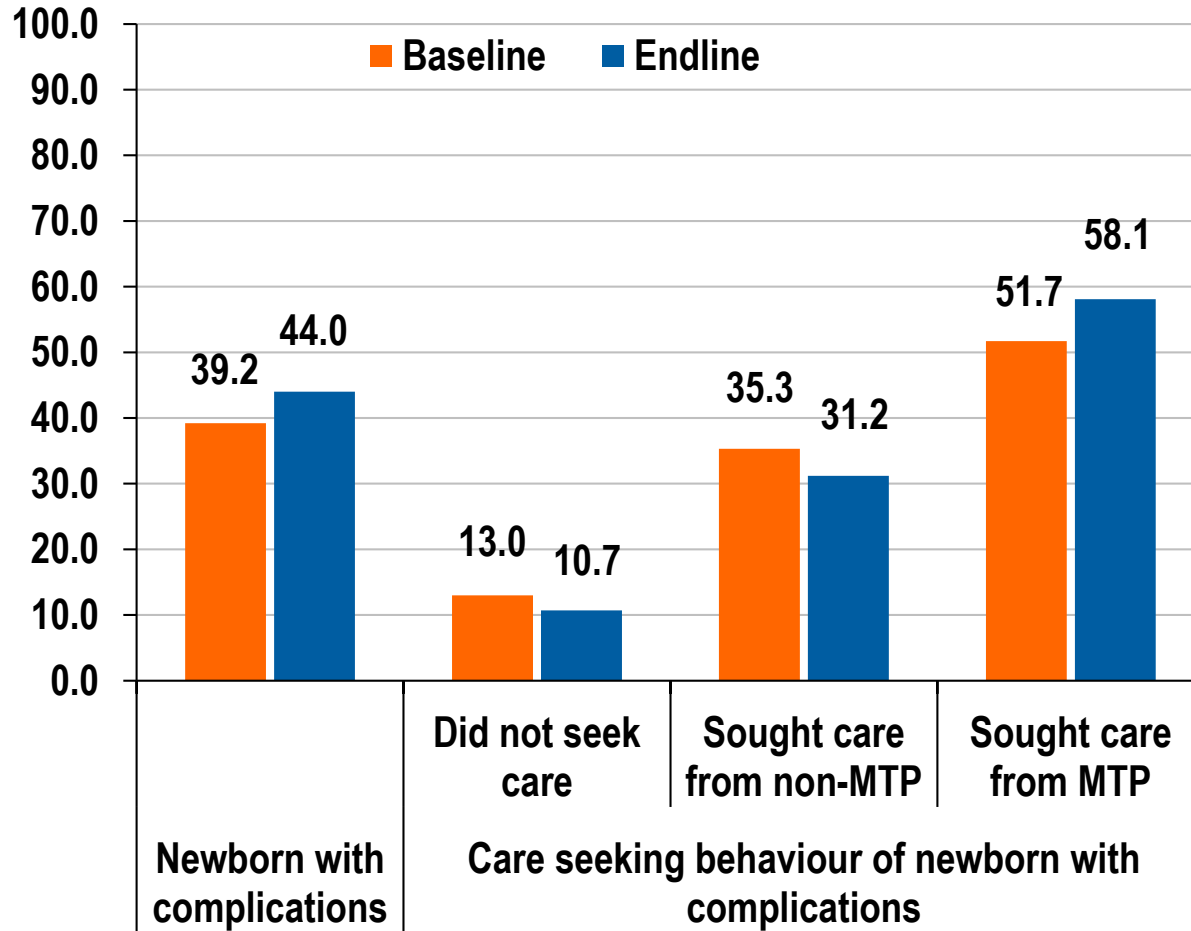
Knowledge on newborn danger signs

Khulna

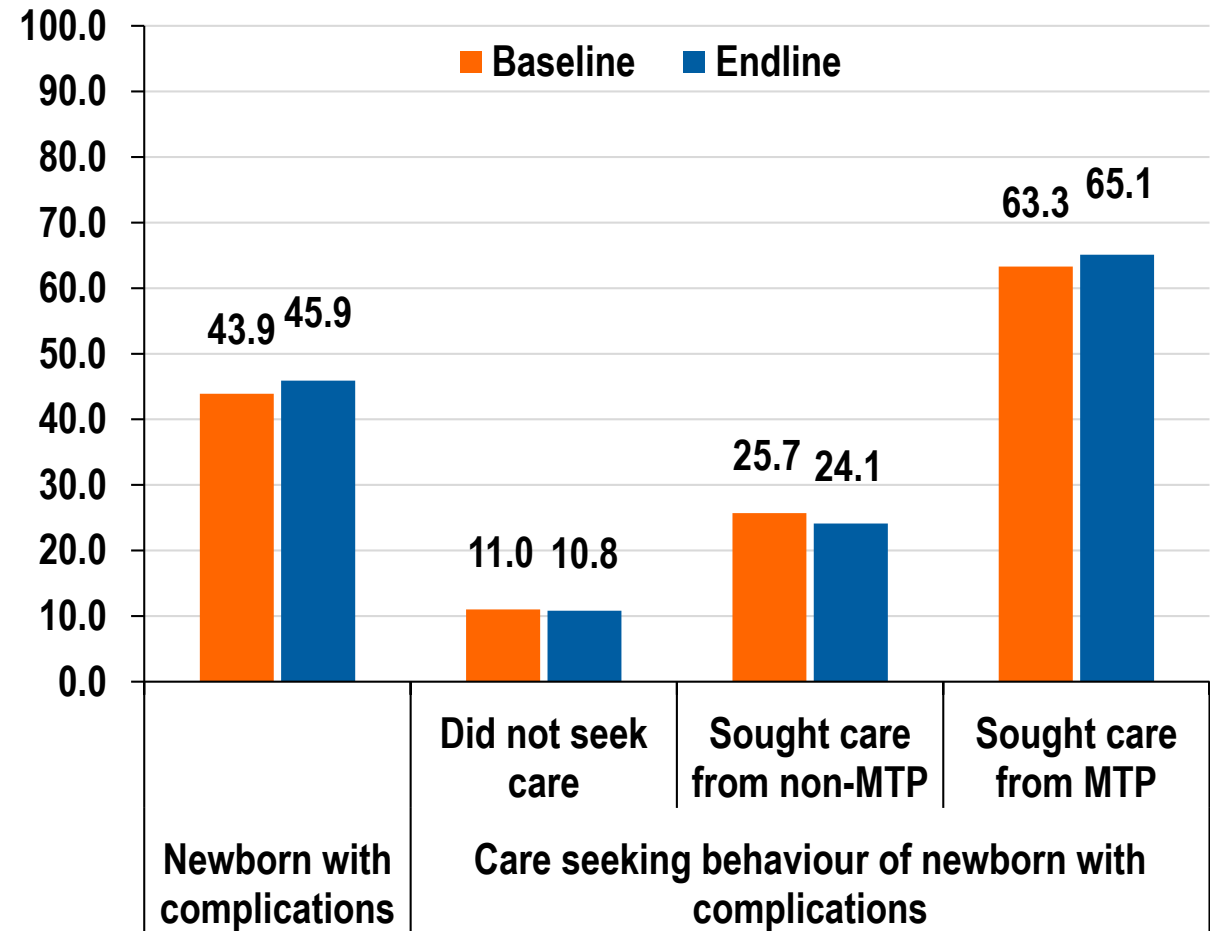


Newborn complications in one month of birth and care seeking behaviour

Tangail



Khulna

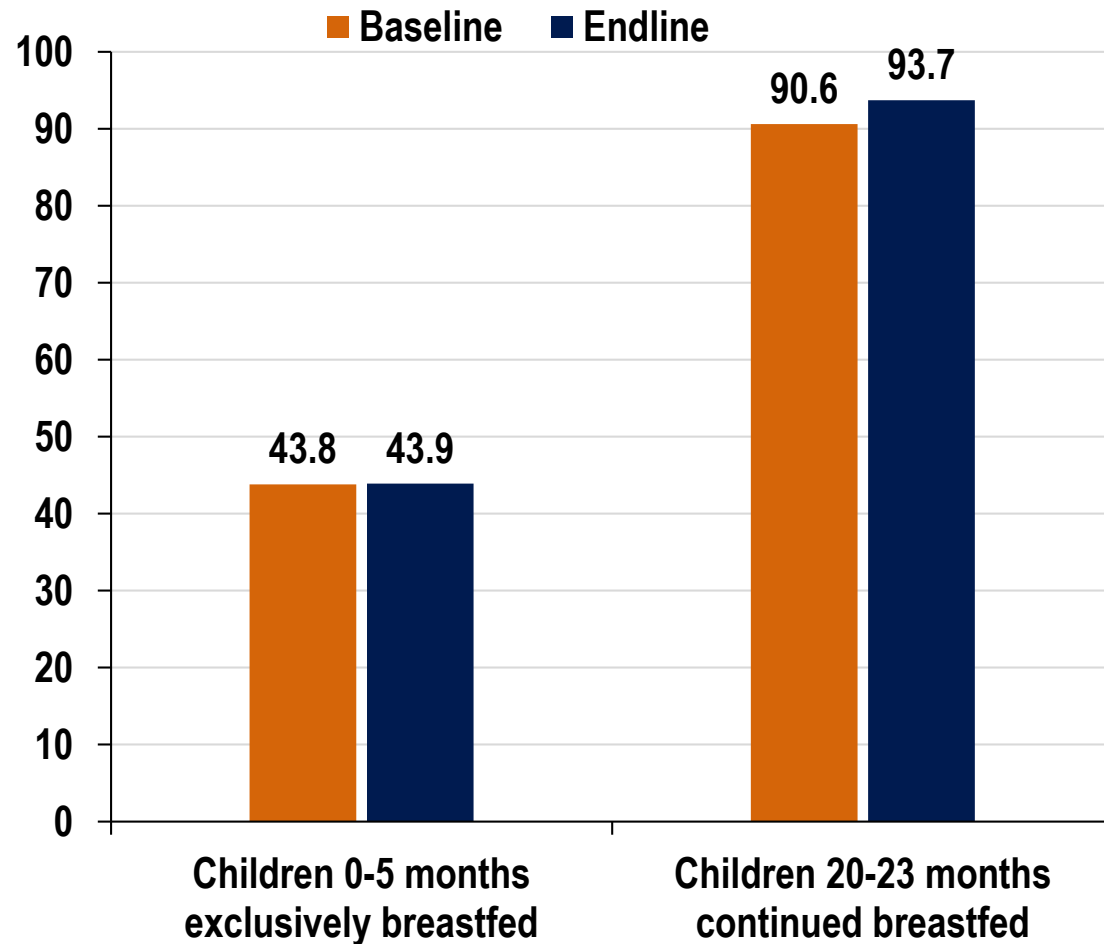


Infant and Young Child Feeding (IYCF) Practices

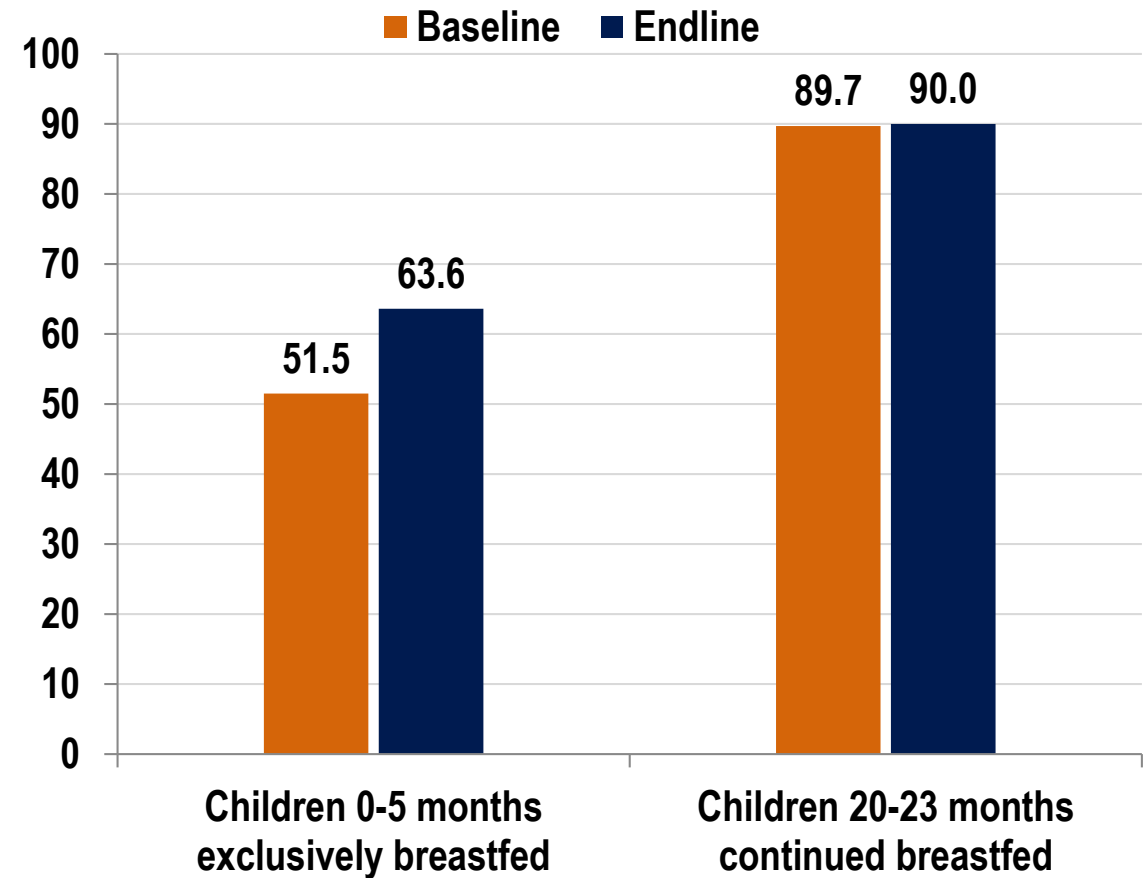
Newborn, young child nutrition care practice through breastfeeding

IYCF practice & child care

Tangail

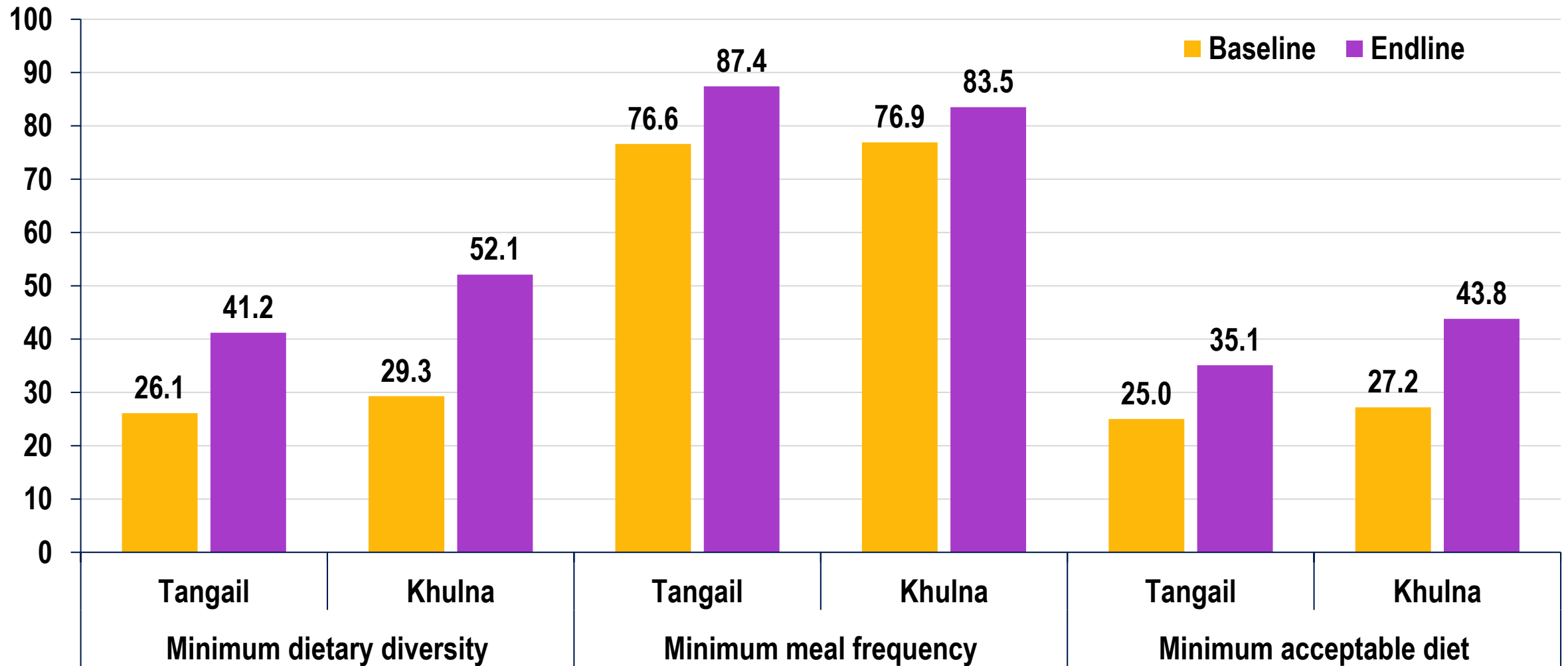


Khulna



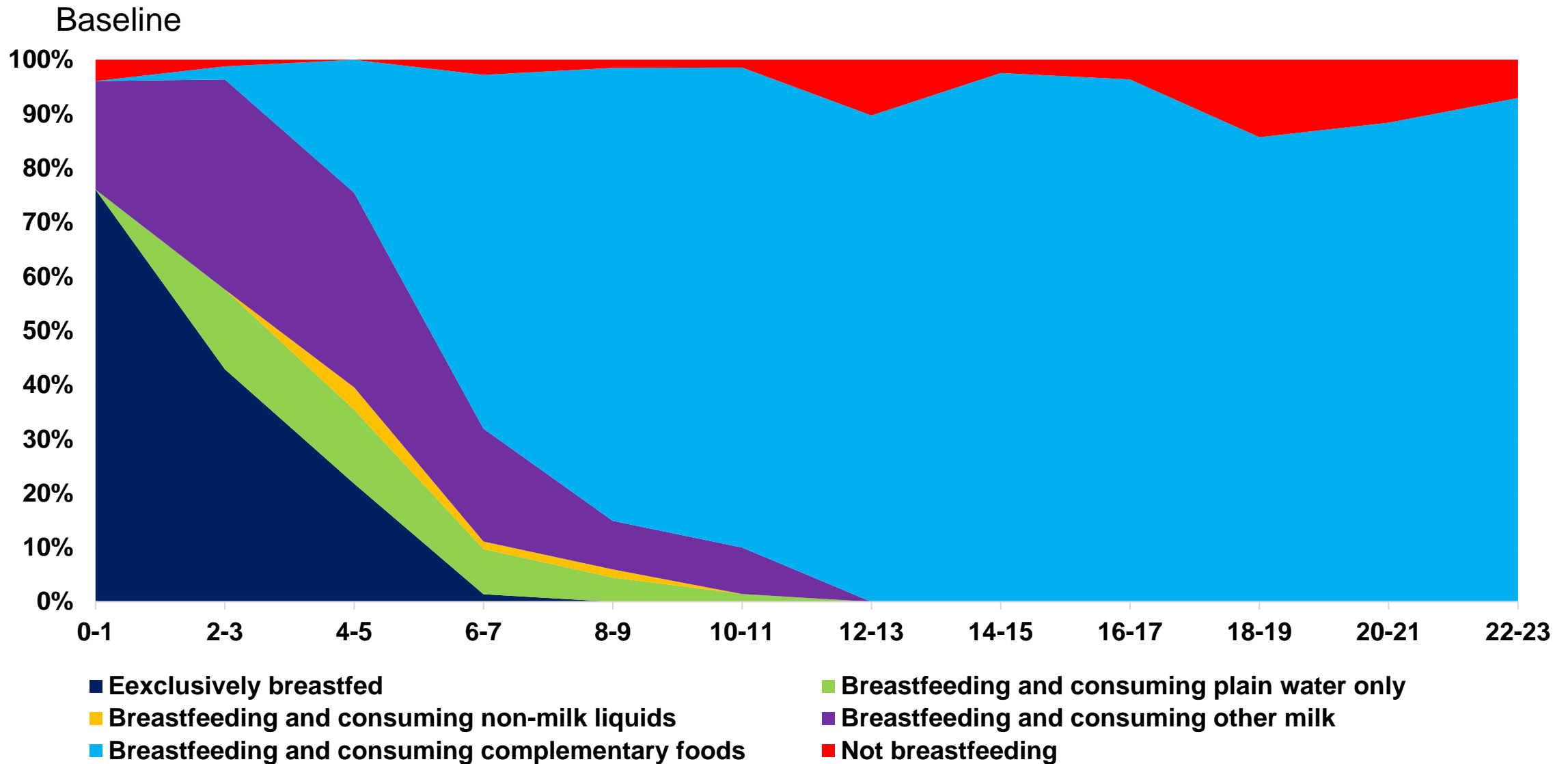
Infant and young child feeding practices to children age 6-23 months

IYCF practice & child care

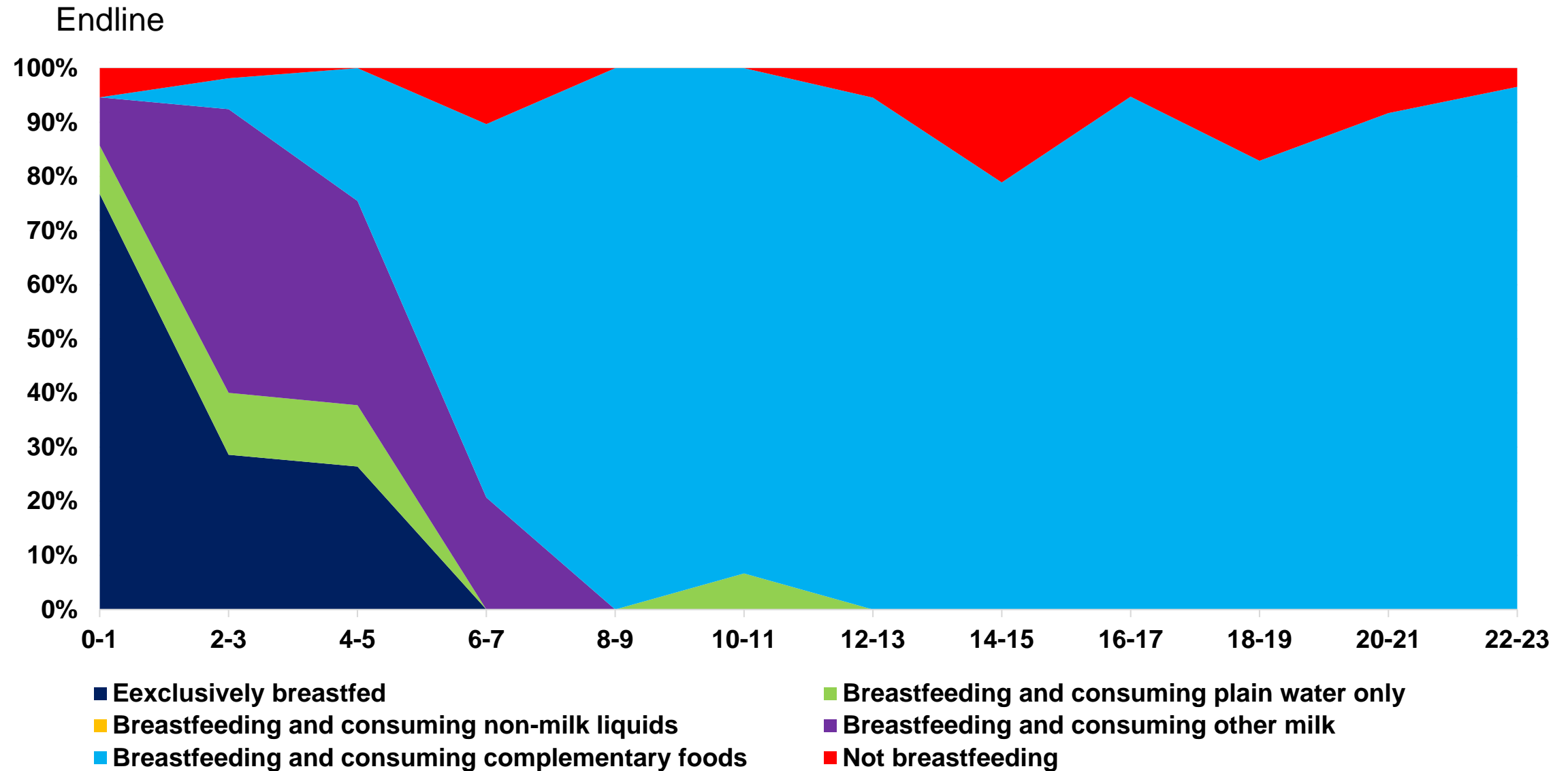


Feeding practice to children age 0-23 months according to age groups in Tangail

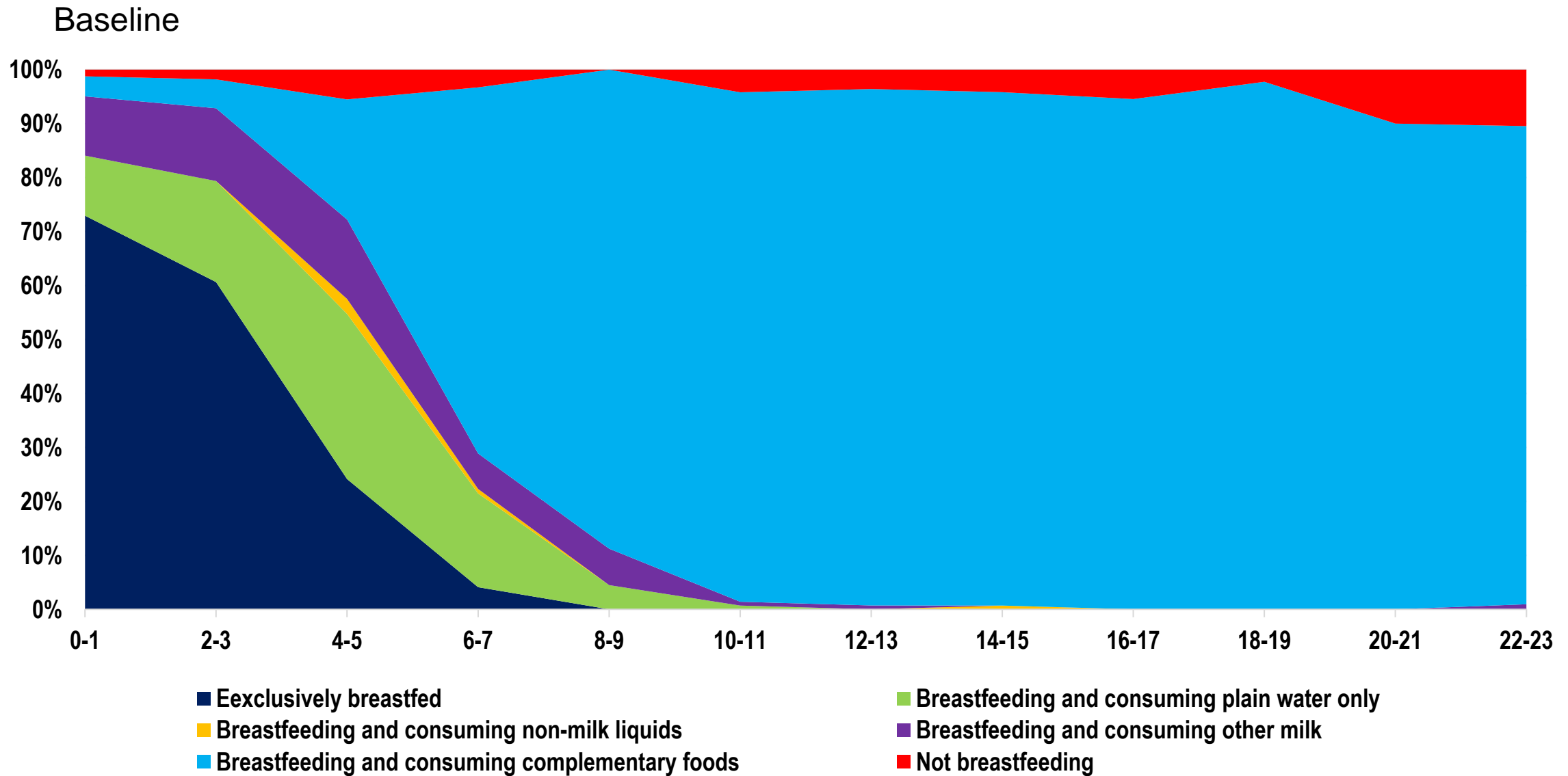
IYCF practice & child care



Feeding practice to children age 0-23 months according to age groups in Tangail

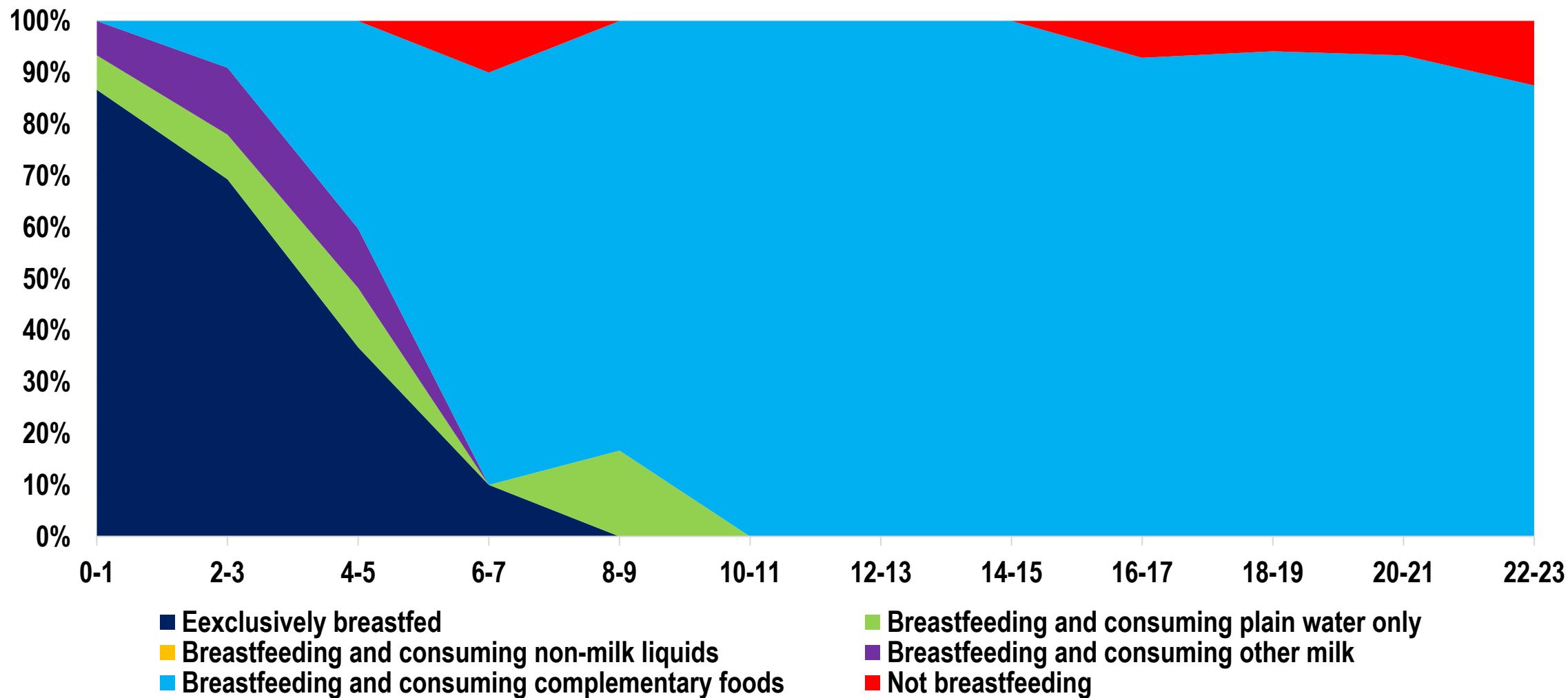


Feeding practice to children age 0-23 months according to age groups in Khulna



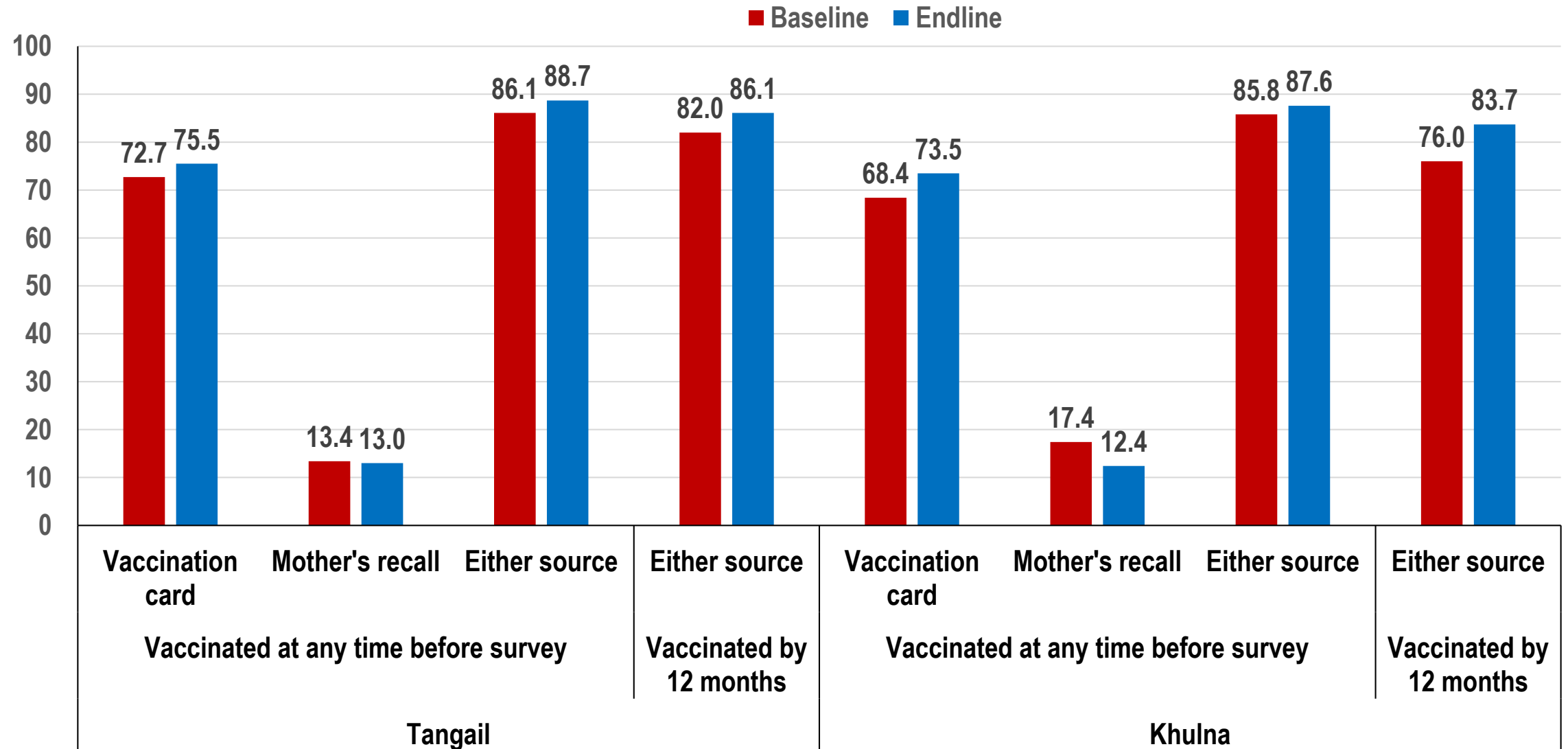
Feeding practice to children age 0-23 months according to age groups in Khulna

Endline

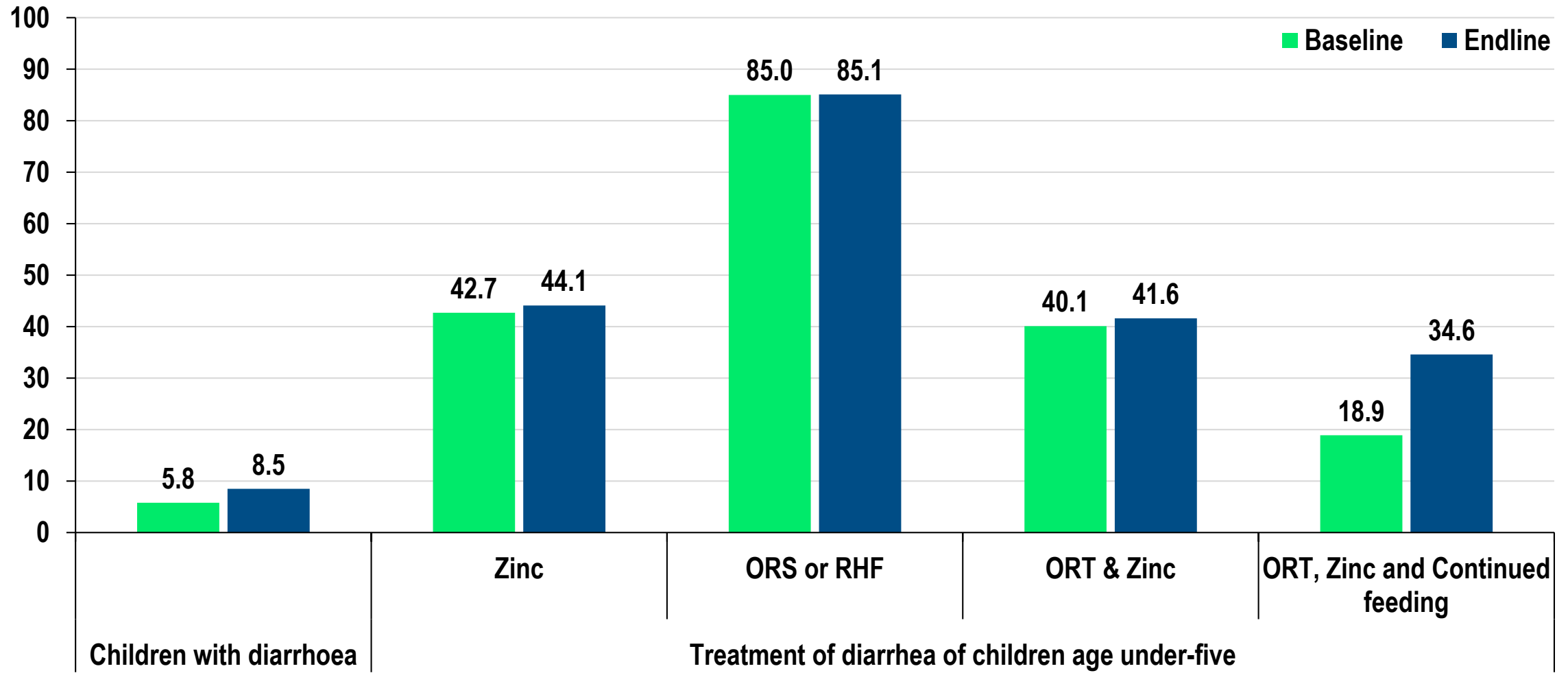


Child Health Morbidity and Mortality

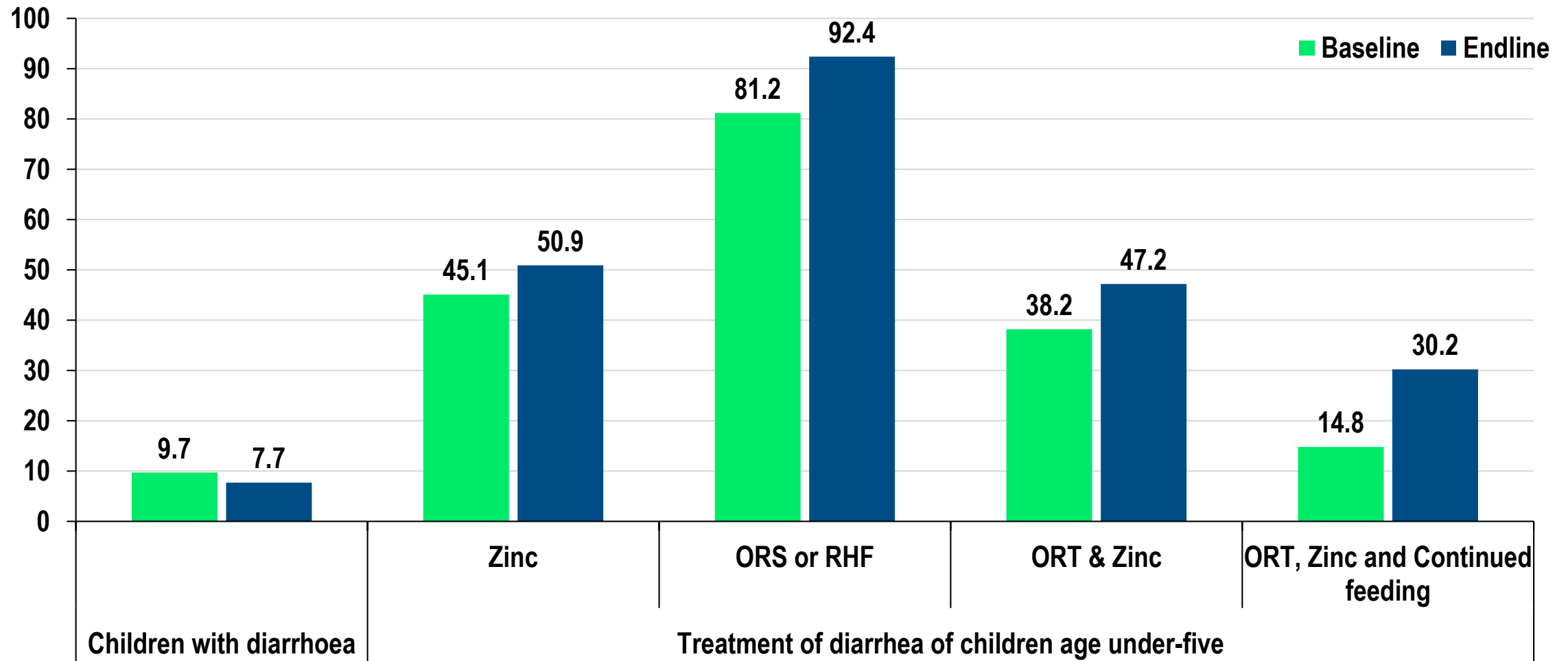
All Vaccination coverage among children age 12-23 months



Treatment of diarrhea to affected children under-five in Tangail



Treatment of diarrhea to affected children under-five in Khulna

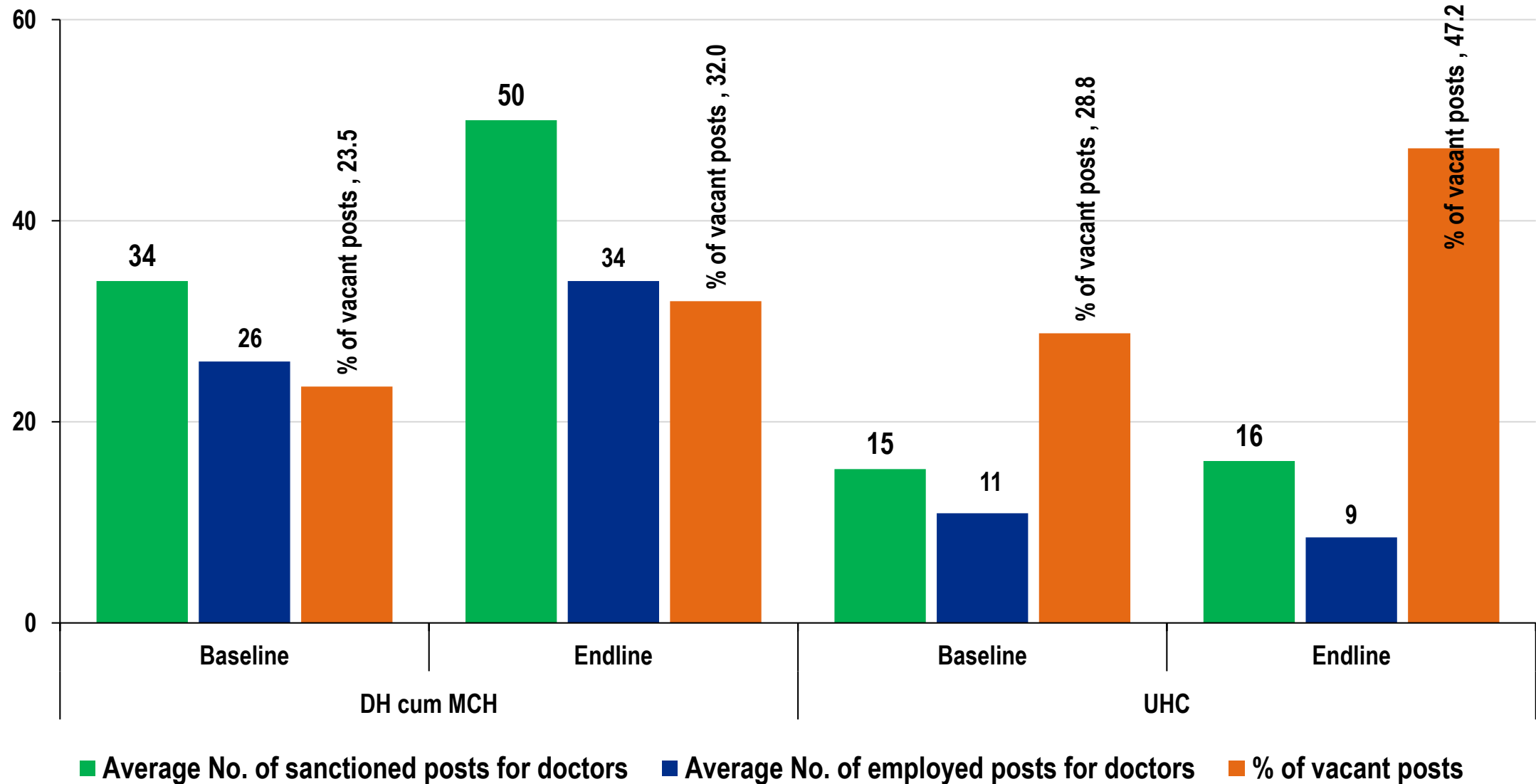


MNCH Services in Health Facilities

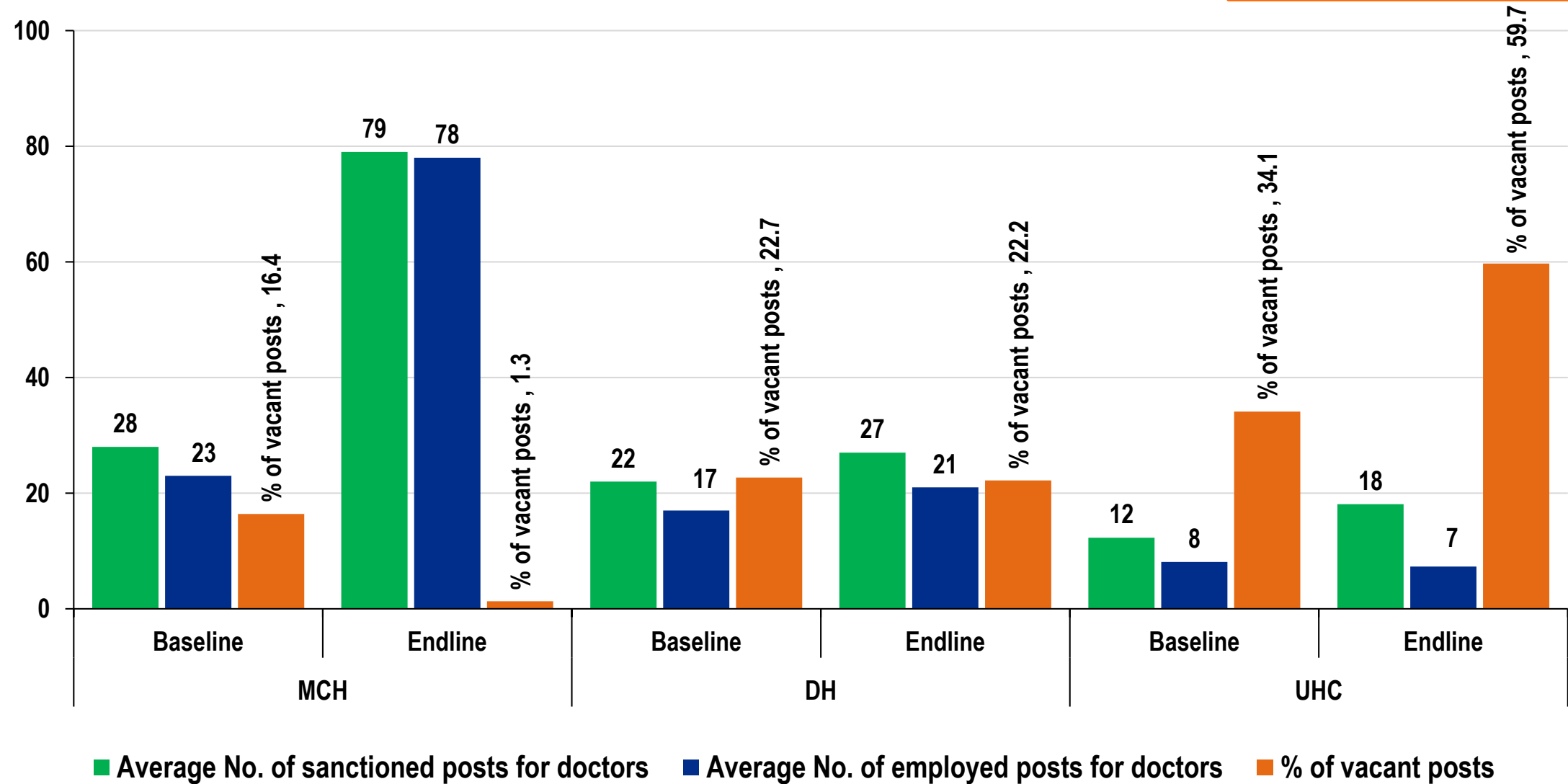
Sample coverage of health facilities

Type of facility	Tangail				Khulna			
	Baseline		Endline		Baseline		Endline	
	No. of available facilities	No. of surveyed facilities	No. of available facilities	No. of surveyed facilities	No. of available facilities	No. of surveyed facilities	No. of available facilities	No. of surveyed facilities
District and upazila public facilities								
MCH	1	1	1	1	1	1	1	1
DH	0	0	0	0	1	1	1	1
MCWC	1	1	1	1	1	1	1	1
UHC	11	11	11	11	9	9	9	9
Other government facilities	0	0	0	0	4	4	4	4
Union level public facilities								
UHFWC/FWC/USC/RD	155	25	159	19	73	18	83	16
Community Clinic	428	35	428	29	192	52	205	20
Total	596	73	600	61	281	86	304	50

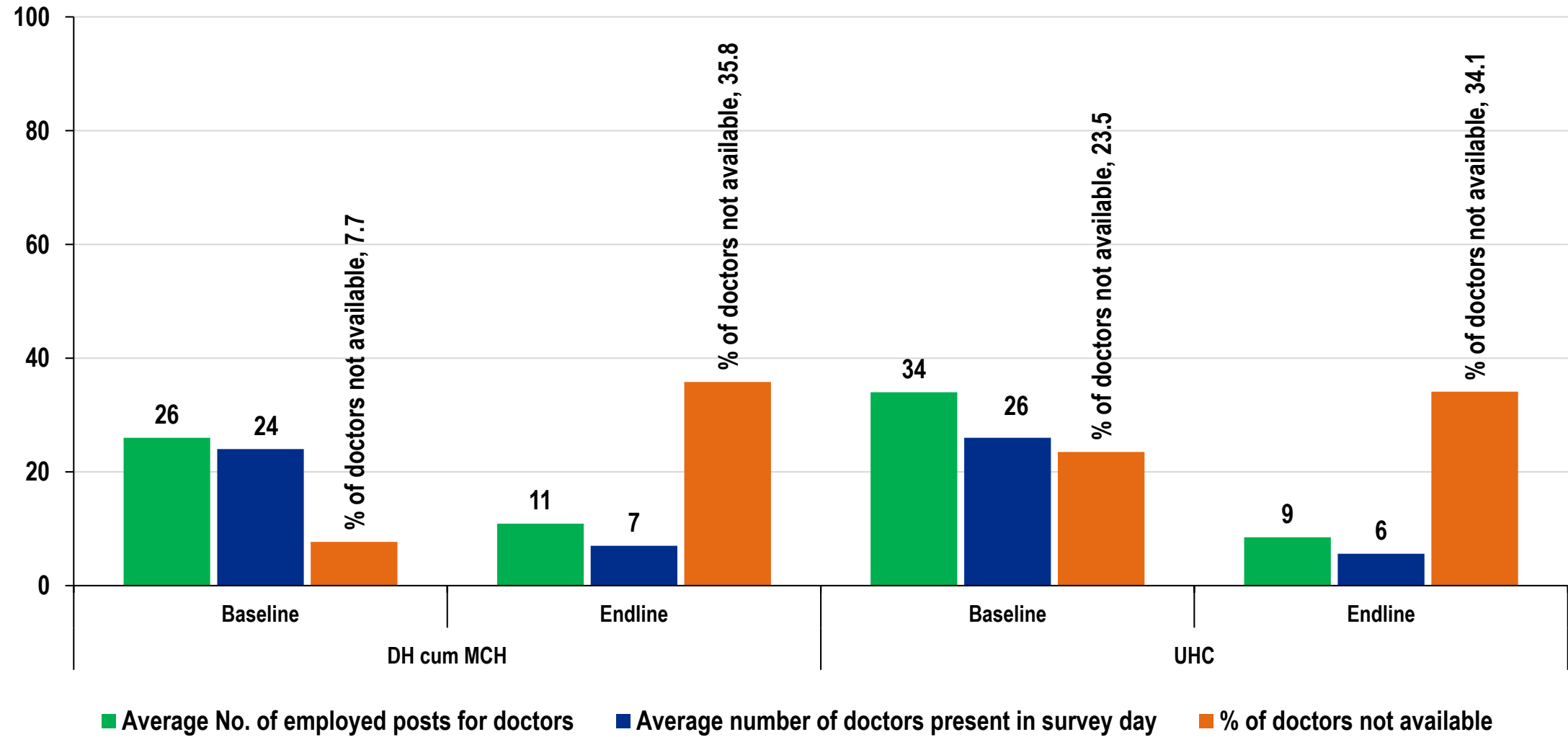
Average Number of Sanctioned and Employed Posts of Doctors in Tangail



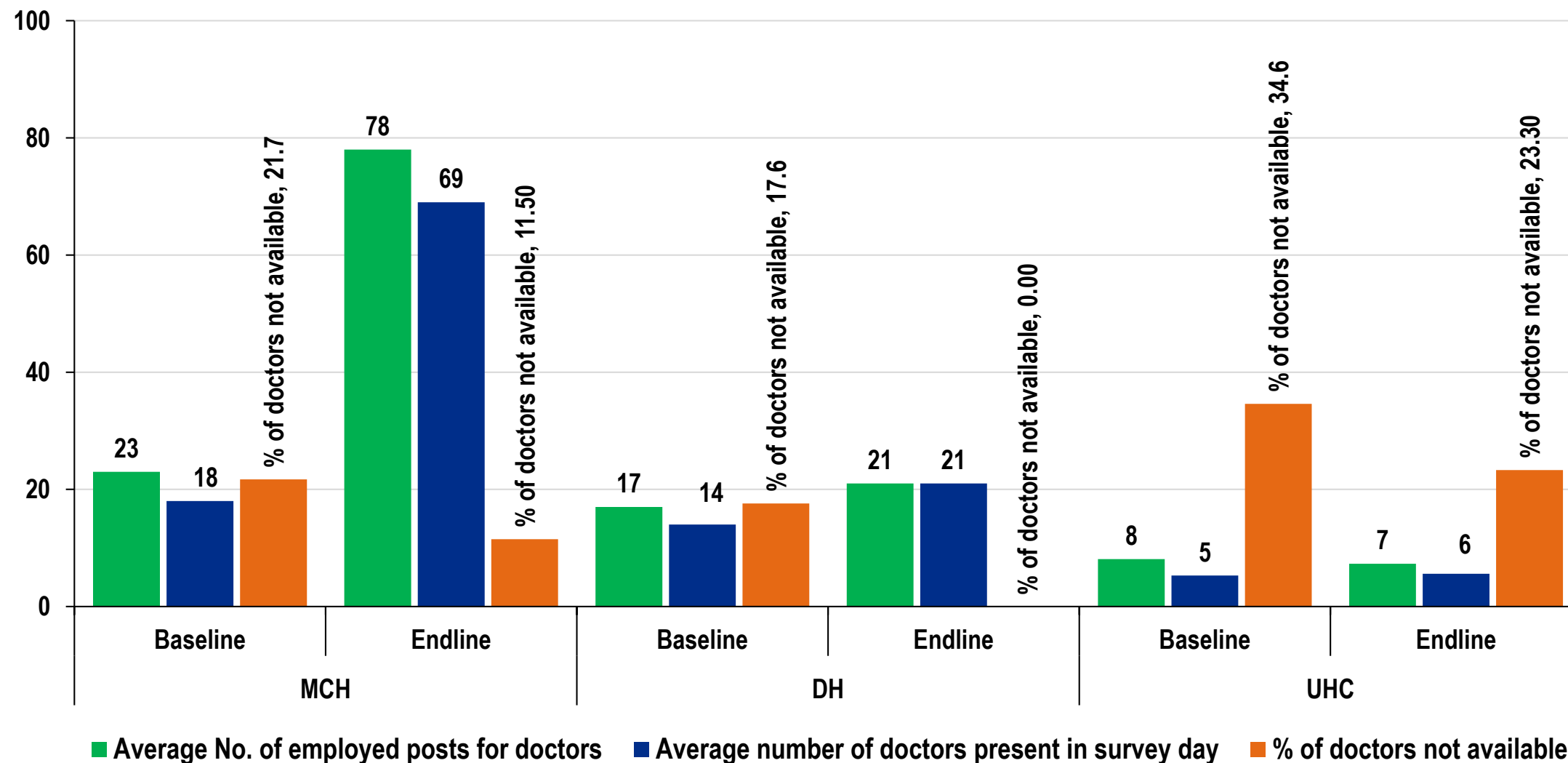
Average Number of Sanctioned and Employed Posts of Doctors in Khulna



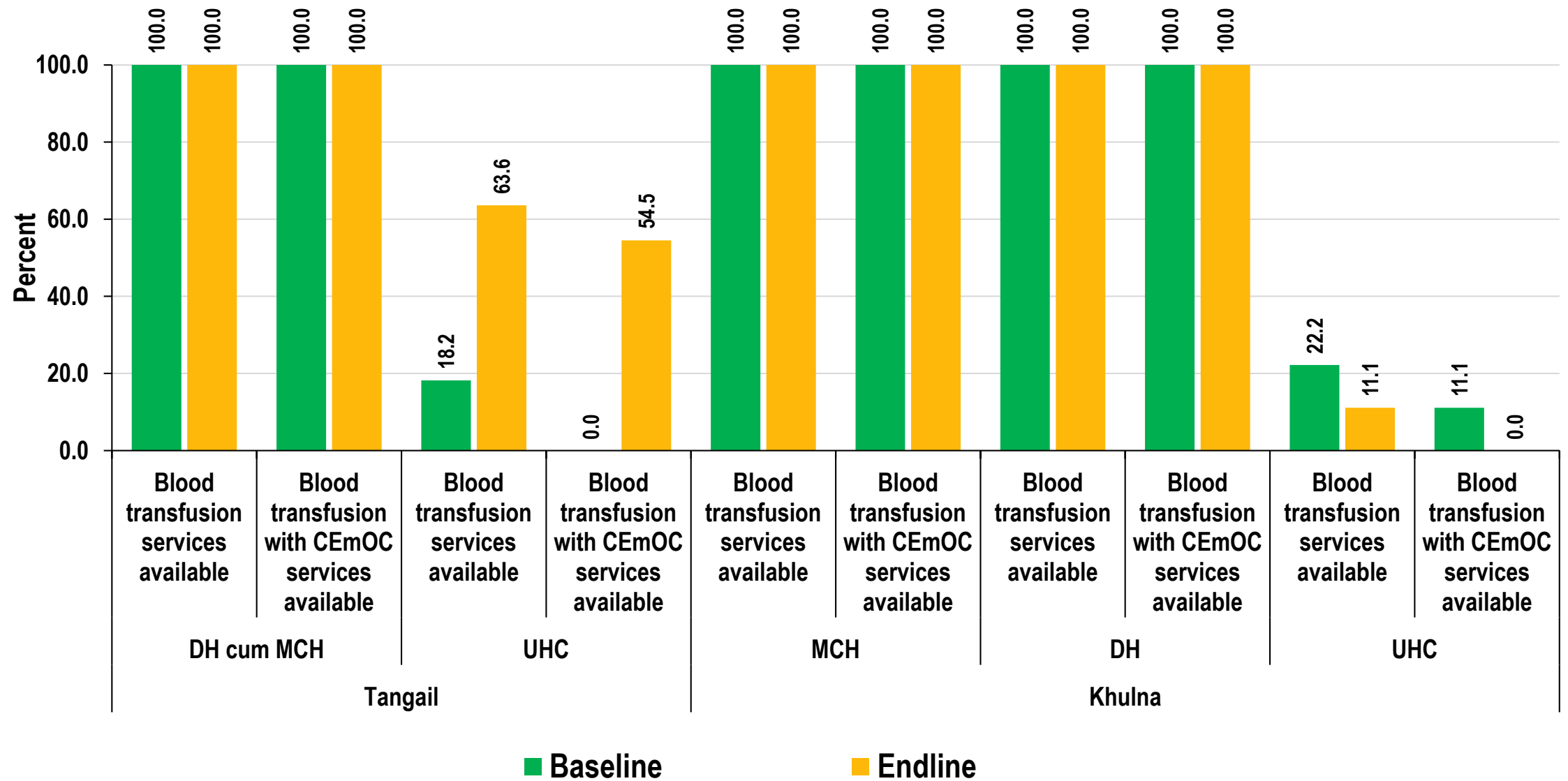
Doctors not available at facility on survey day in Tangail (among employed posts)



Doctors not available at facility on survey day in Khulna (among employed posts)

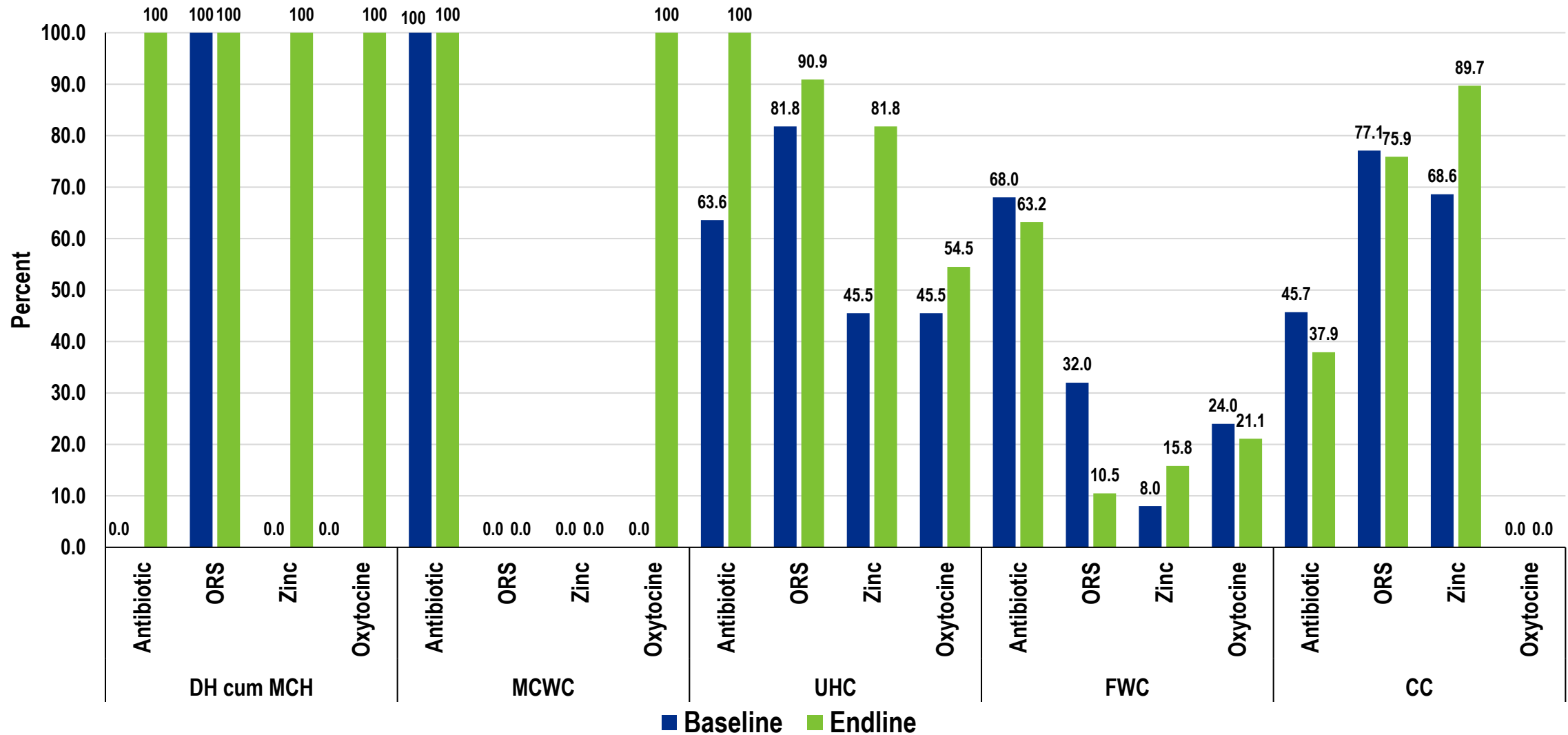


Blood Transfusion (screening, collection and transfusion) and CEmOC Services



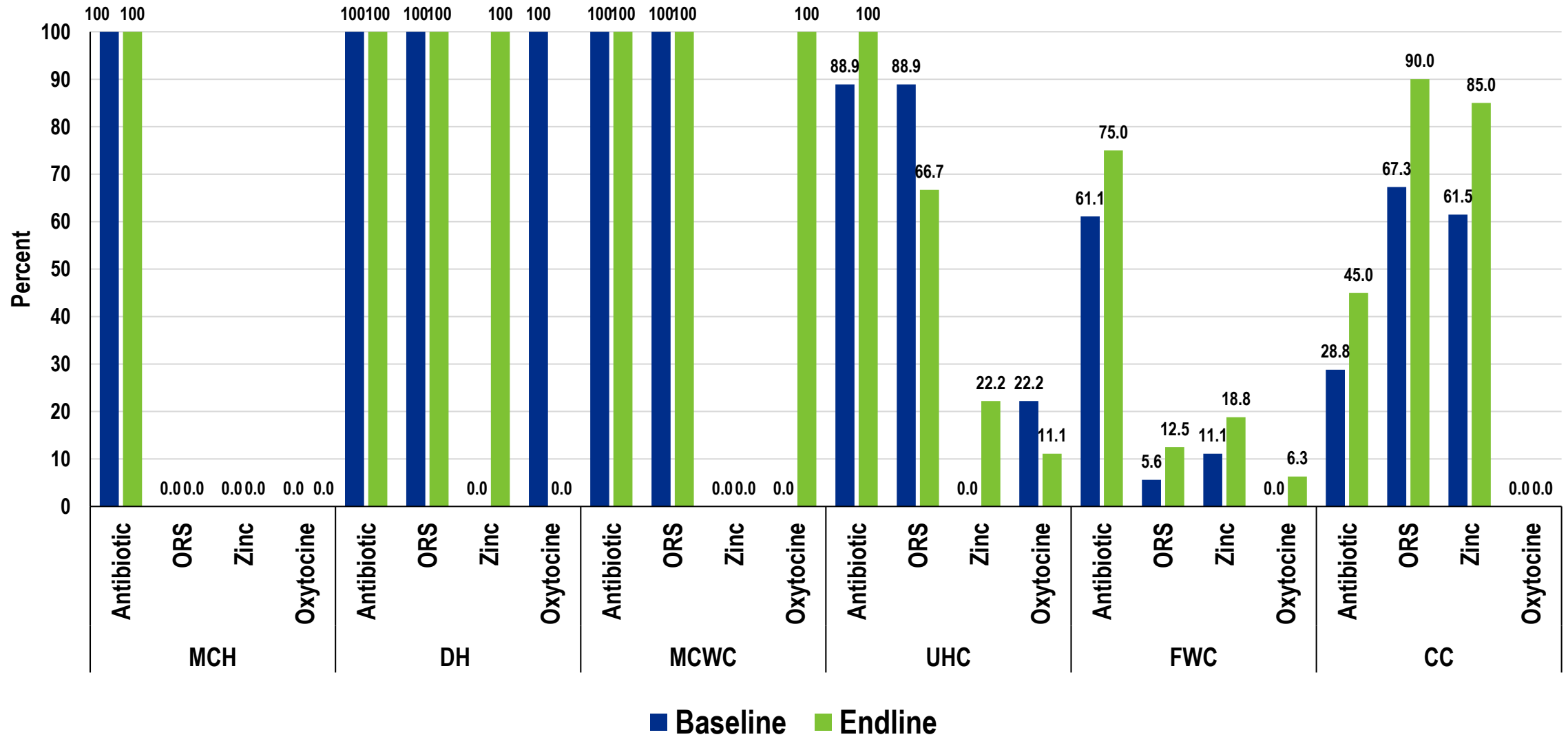
No stock out record of essential medicines in any time in last 3 months prior to survey in Tangail

Health Facility Survey

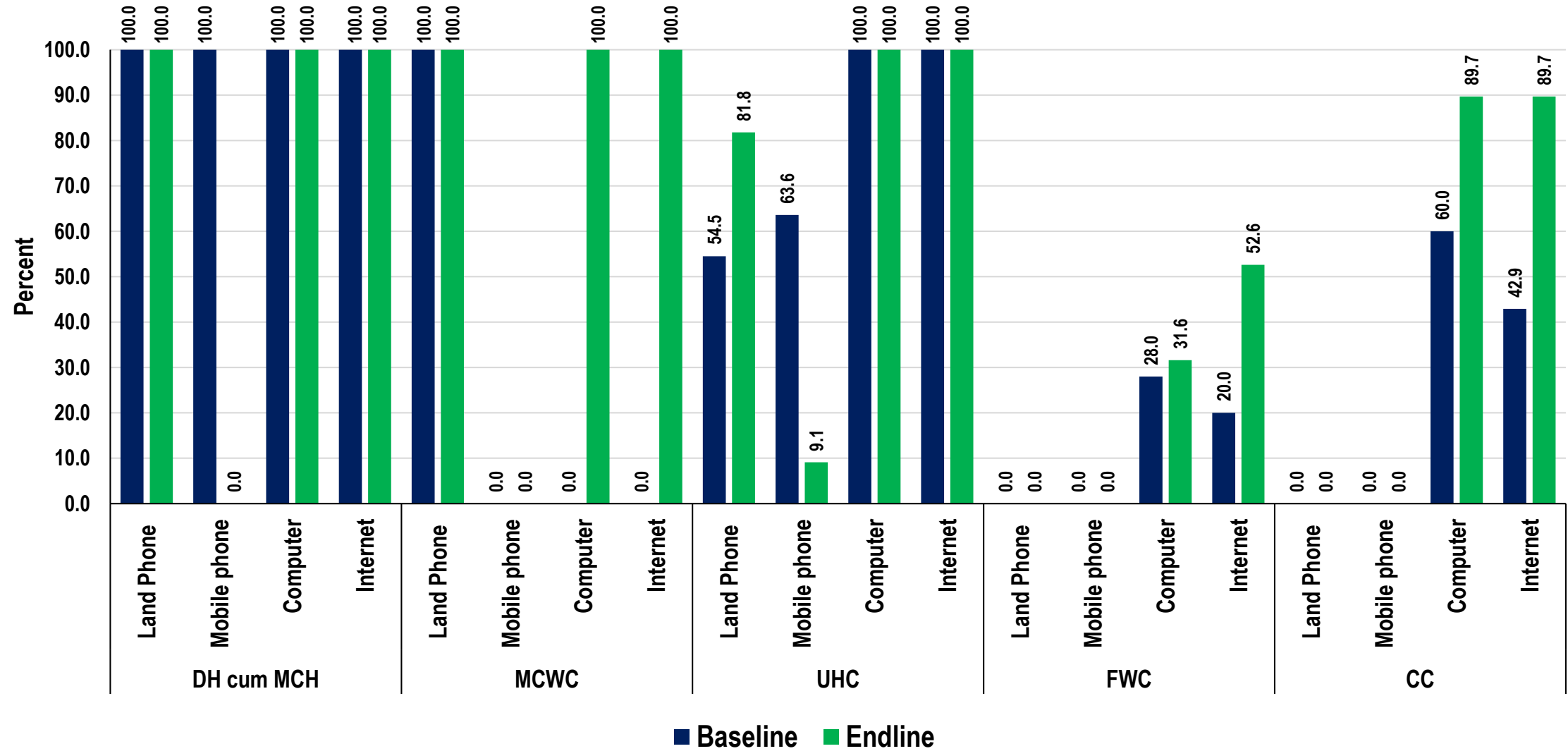


No stock out record of essential medicines in any time in last 3 months prior to survey in Khulna

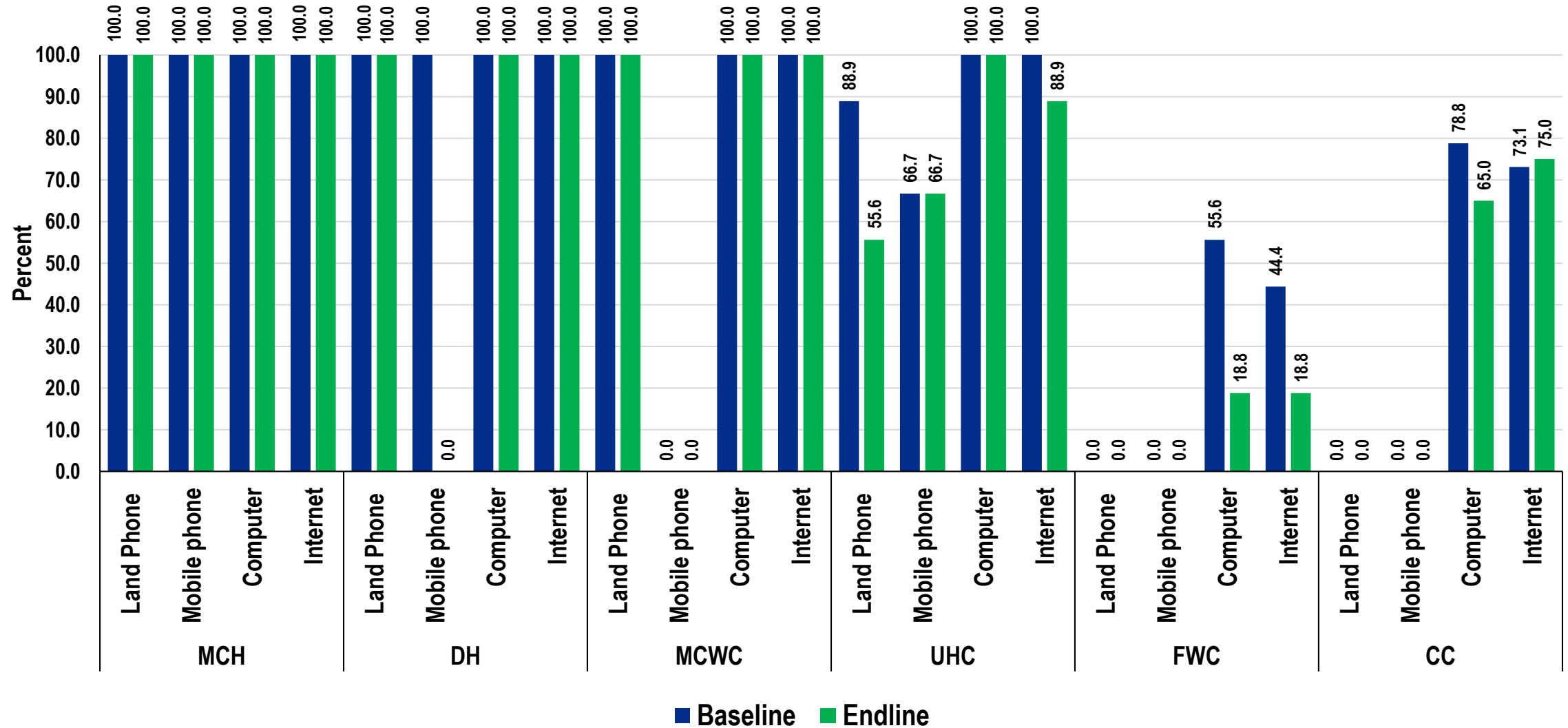
Health Facility Survey



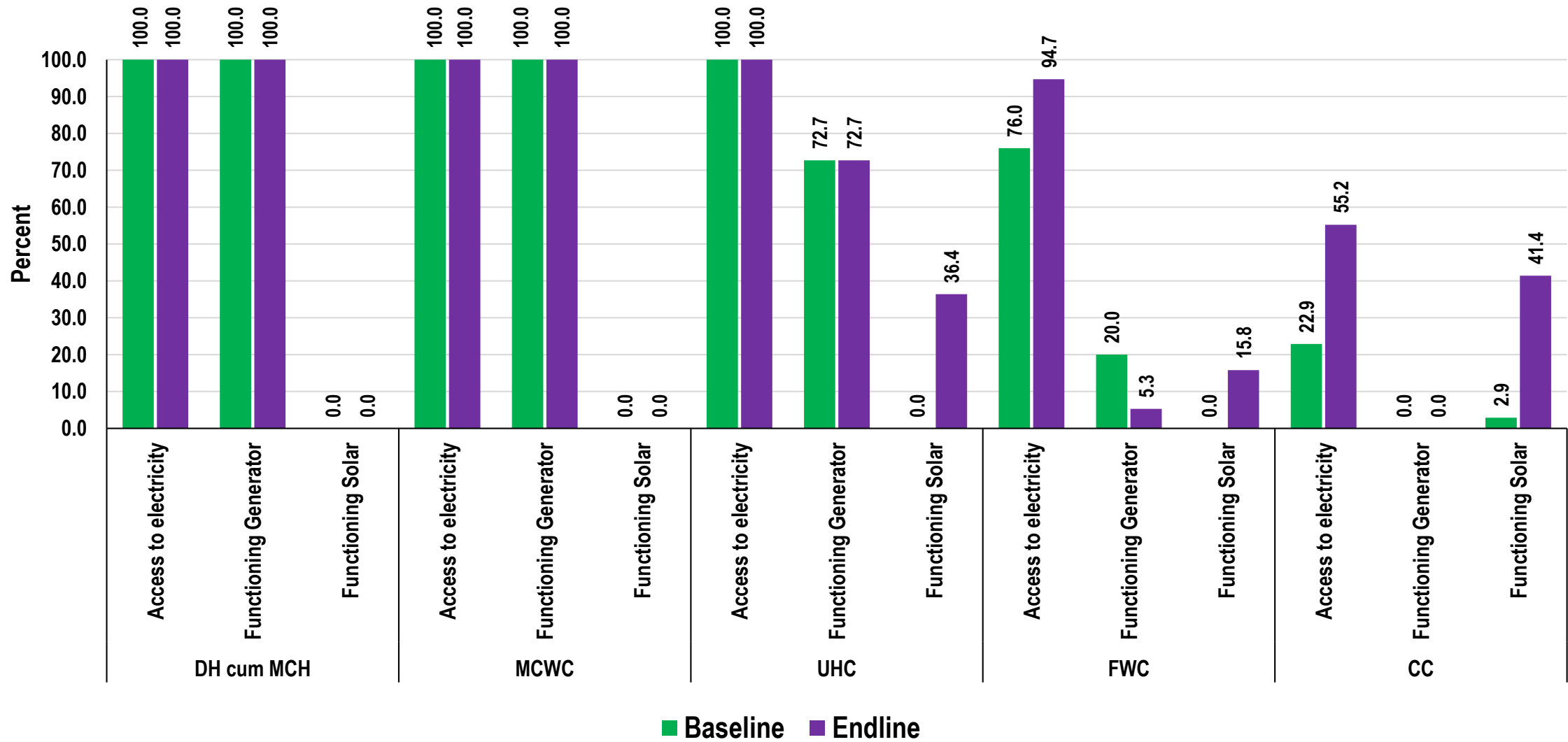
Functioning communication systems for service recipients (land phone, mobile phone, computer, internet access) in Tangail



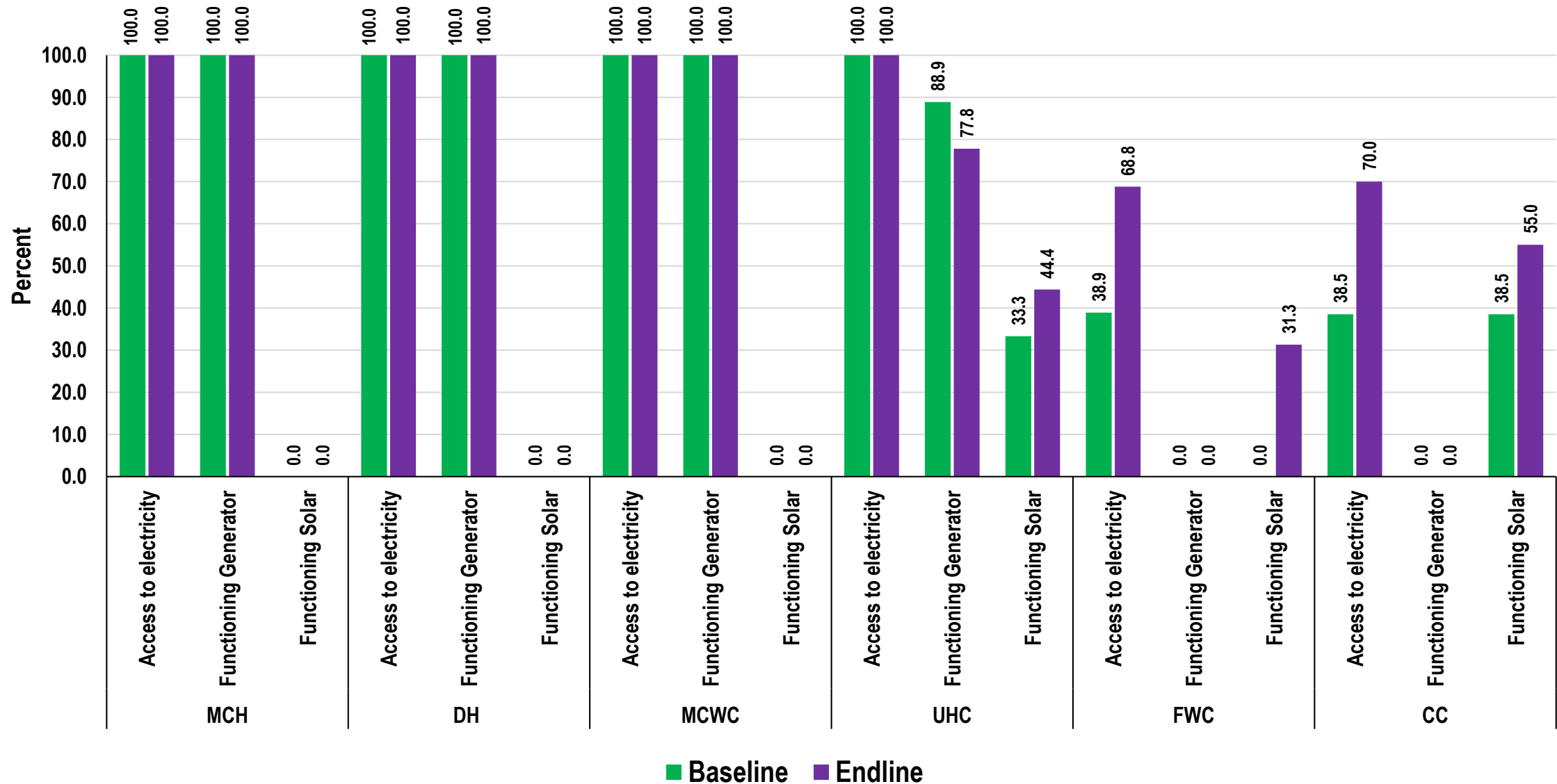
Functioning communication systems for service recipients (land phone, mobile phone, computer, internet access) in Khulna



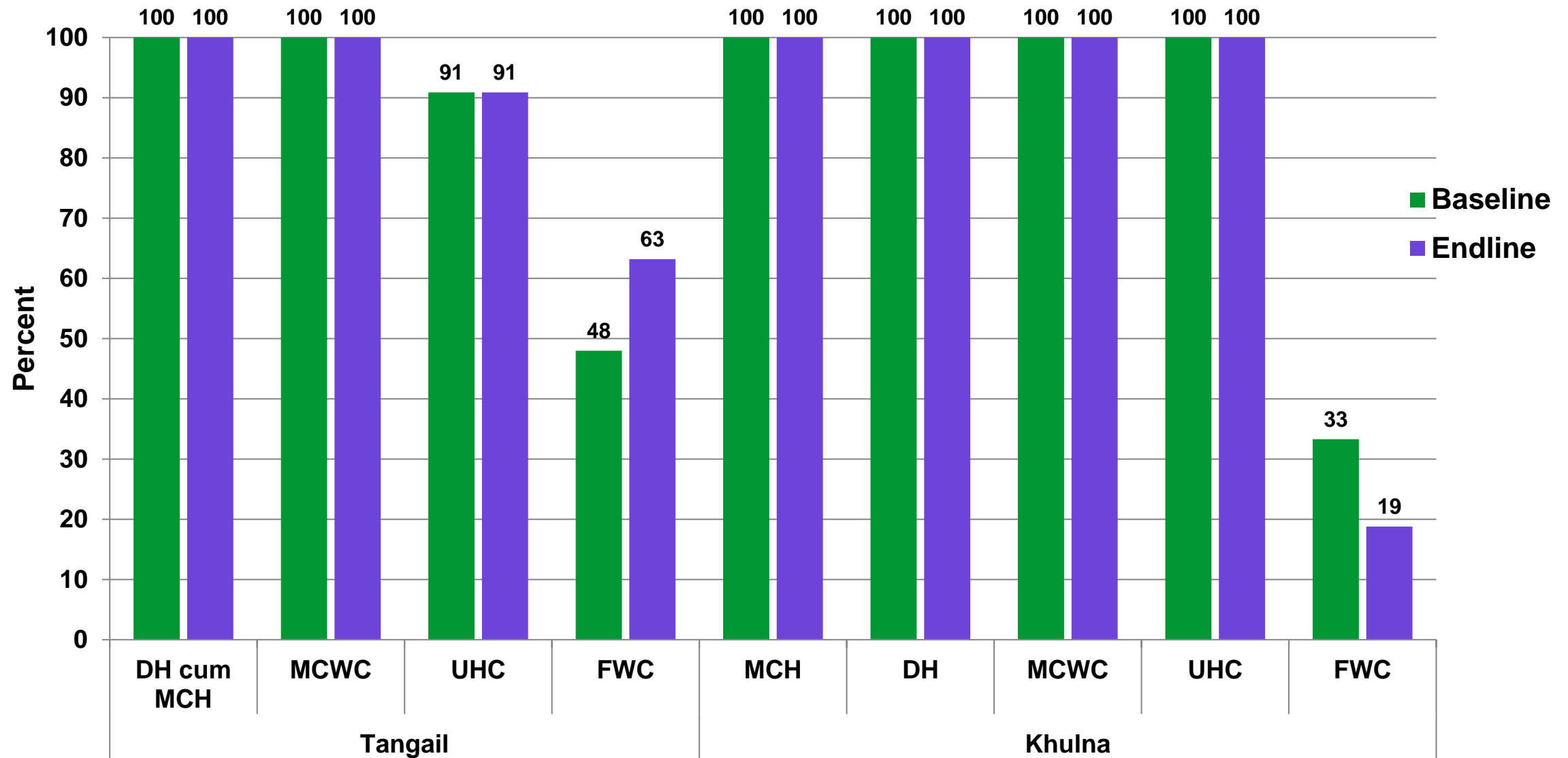
Power supply systems (electricity, generator, solar system) in Tangail



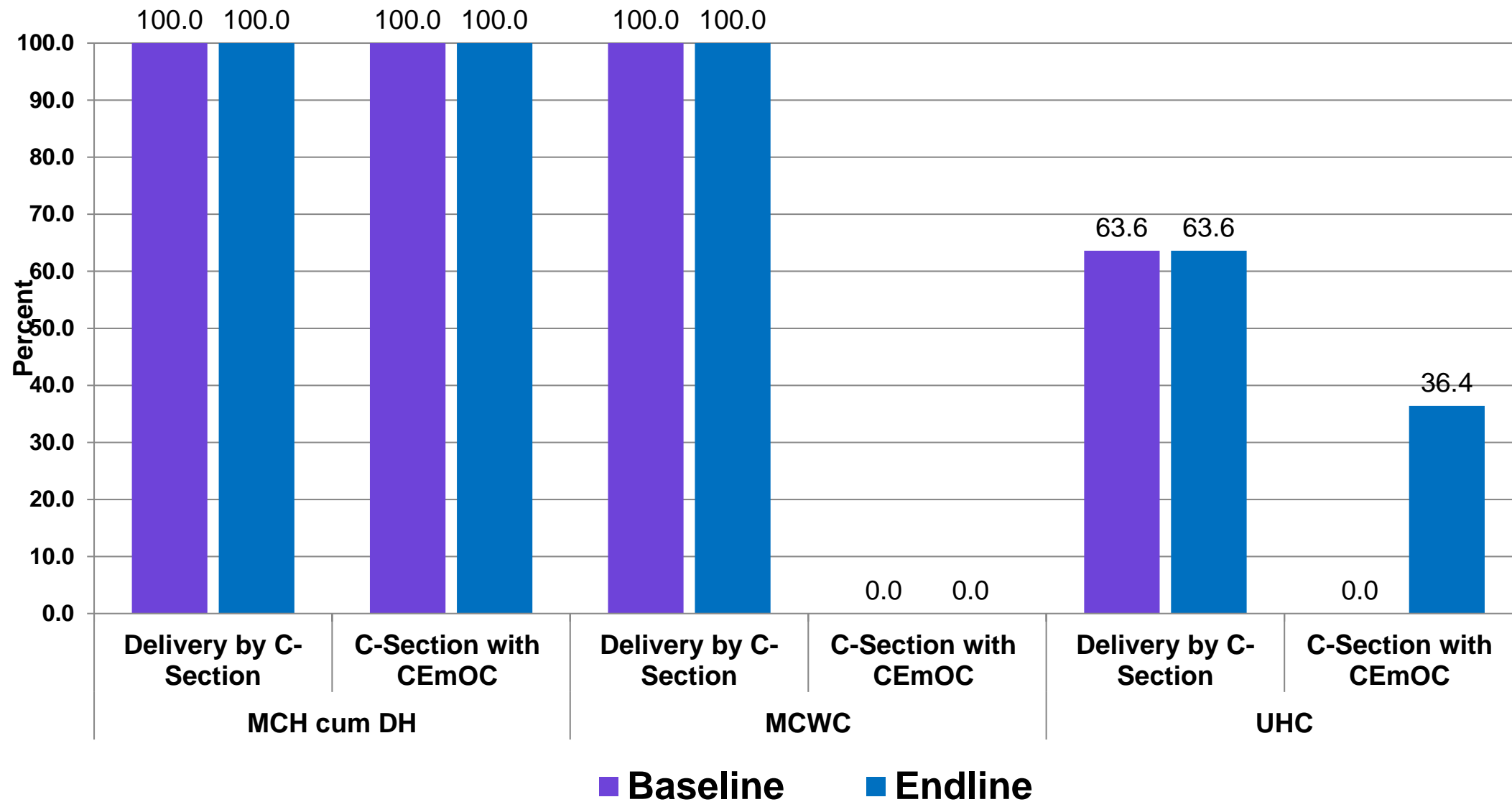
Power supply systems (electricity, generator, solar system) in Khulna



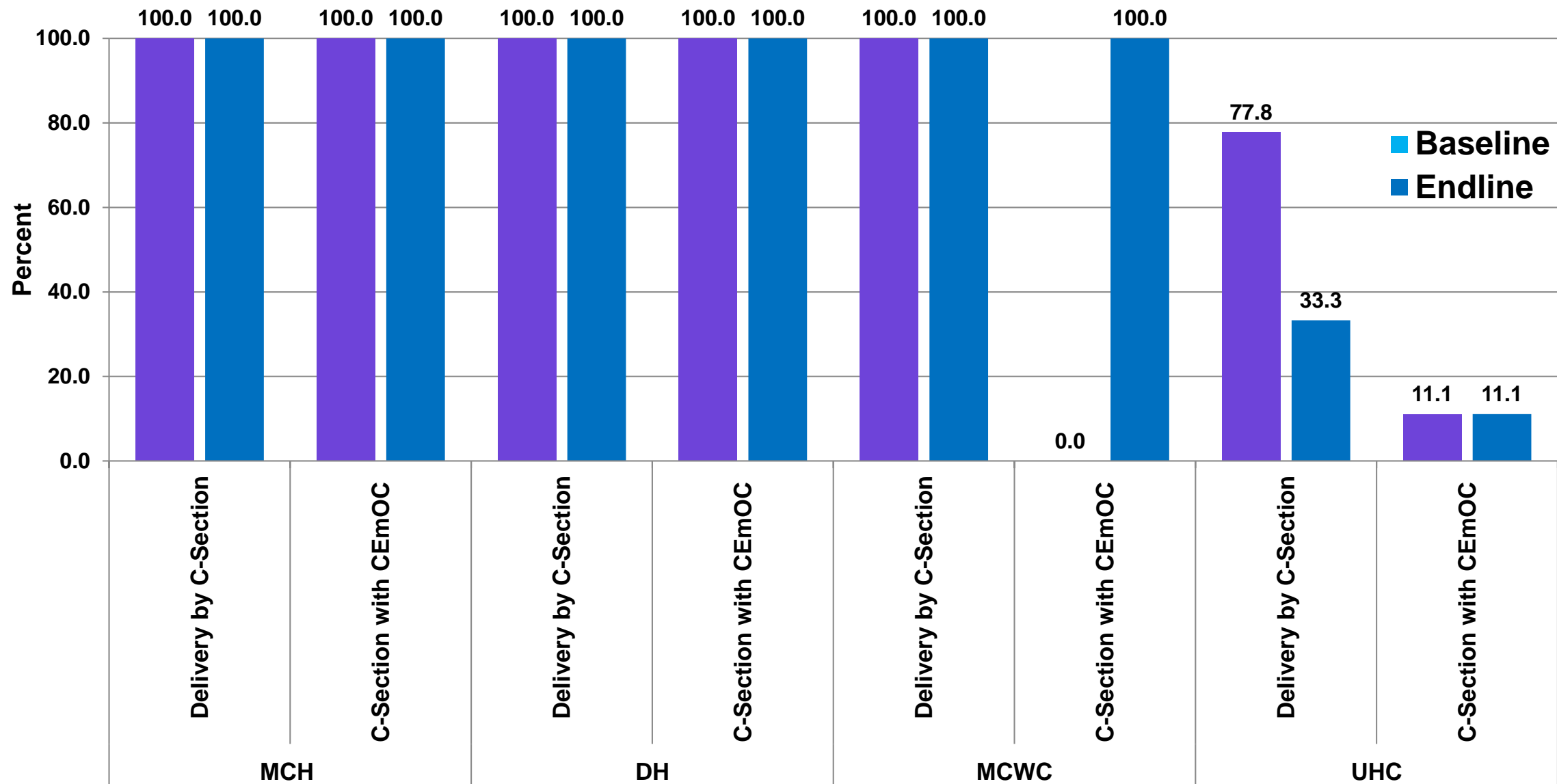
Facility with Normal Delivery Services



Facility with C-Section and CEmOC Services in Tangail



Facility with C-Section and CEmOC Services in Khulna



Effectiveness
Impact
Sustainability

Effectiveness

- **Training on MPDSR, post partum family planning, users' right and supportive supervision was provided to service providers to improve their capacity at facility and community**
- **Establishment of NSU and SCANU contributed to reducing neonatal deaths**
- **Quality of service delivery enhanced through establishment of CQI and TQM**

Impact

- **Concept, behavior and practice of targeted mothers regarding MNCHN and institutional service changed**
- **Capacity of service providers in providing MNCHN service at facility and community improved**

Sustainability

- **Emergency Obstetric Care, EPI, IMCI, NSU and SCANU will continue**
- **MPDSR, CQI and TQM become mainstreamed**
 - **health managers are motivated to continue these activities**

Recommendations

Recommendations

Continue...

- **Awareness of mothers and care givers as well as of community people on MNCHN issues increased considerably but its practices are lagging behind. So to enhance awareness and practice community mobilization and awareness raising programs should be further strengthened and continued**
- **Availability of essential MNCH medicines like antibiotic, oxytocine, ORS and Zinc at facilities is of crucial necessity for MNCH services. So uninterrupted supply of essential medicines, equipment and logistics should be ensured at district, upazila, union, and community level facilities**

Recommendations

[Continue...](#)

- **A female CHCP should be trained in CSBA so that she can provide delivery and all ANC and PNC services**
- **Midwives should be posted at all upazila and district hospitals to ensure 24 hours/ 7 days continuum of MNCH & N care as per protocol**
- **All upazila hospitals should be upgraded and established with all CmONC services**
- **SCANU and NSU should be established and made functional at all upazila and district hospitals**

Recommendations

[Continue...](#)

- **For effective functioning of ‘Evidence based Planning and Budgeting system’ capacity of local level staffs at upazila and unions should be enhanced through appropriate training/refresher training to ensure effective use of data including that from DHIS2 and MPDSR**
- **Project should be continued for another term particularly targeting for sustainability and impact**

Study team

SURCH and Institute of Health Economics, University of Dhaka

Professor Muhammad Shuaib
Professor Dr. Sushil Ranjan Hawladar
Dr. Nasrin Sultana
Dr. Rafia Rahman
MAFM Ahnaf
Md. Mokhlesur Rahman
Md. Ziaul Hasan Sikder
Mohammad Shakwat Hossain Khan
Muhammad Rashed
Muhammad Tareq
Muhammad Sadeq

Thank You