

Cardiovascular Surgery Database in Asia

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ASCVTS Database Committee**

**Plenary 4: Cardiovascular Surgery Database
for Quality Improvement**

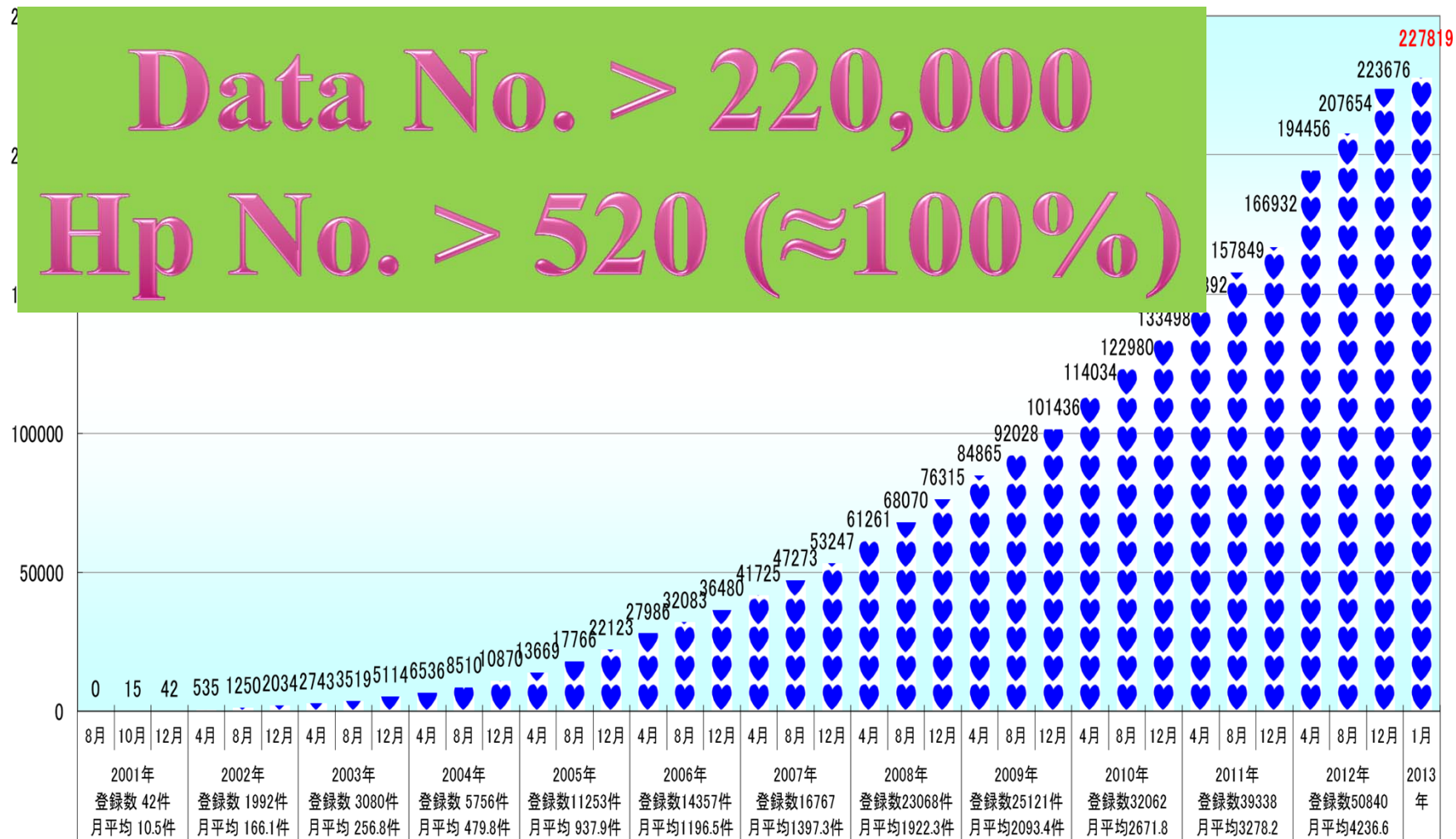
**Room B, Kobe International Convention Center
21st ASCVTS, 2013/04/05 (Fri)**

Japan Cardiovascular Surgery Database (JCVSD)

- ❑ Database linked with the Board Certification this year.
- ❑ 100% of CVS units have joined with JCVSD
- ❑ Several scientific papers have come by using the JCVSD.
- ❑ PCI database has joined with JCVSD as well.

Cumulative Data Entry (Adult)

Data No. > 220,000
Hp No. > 520 (≈100%)

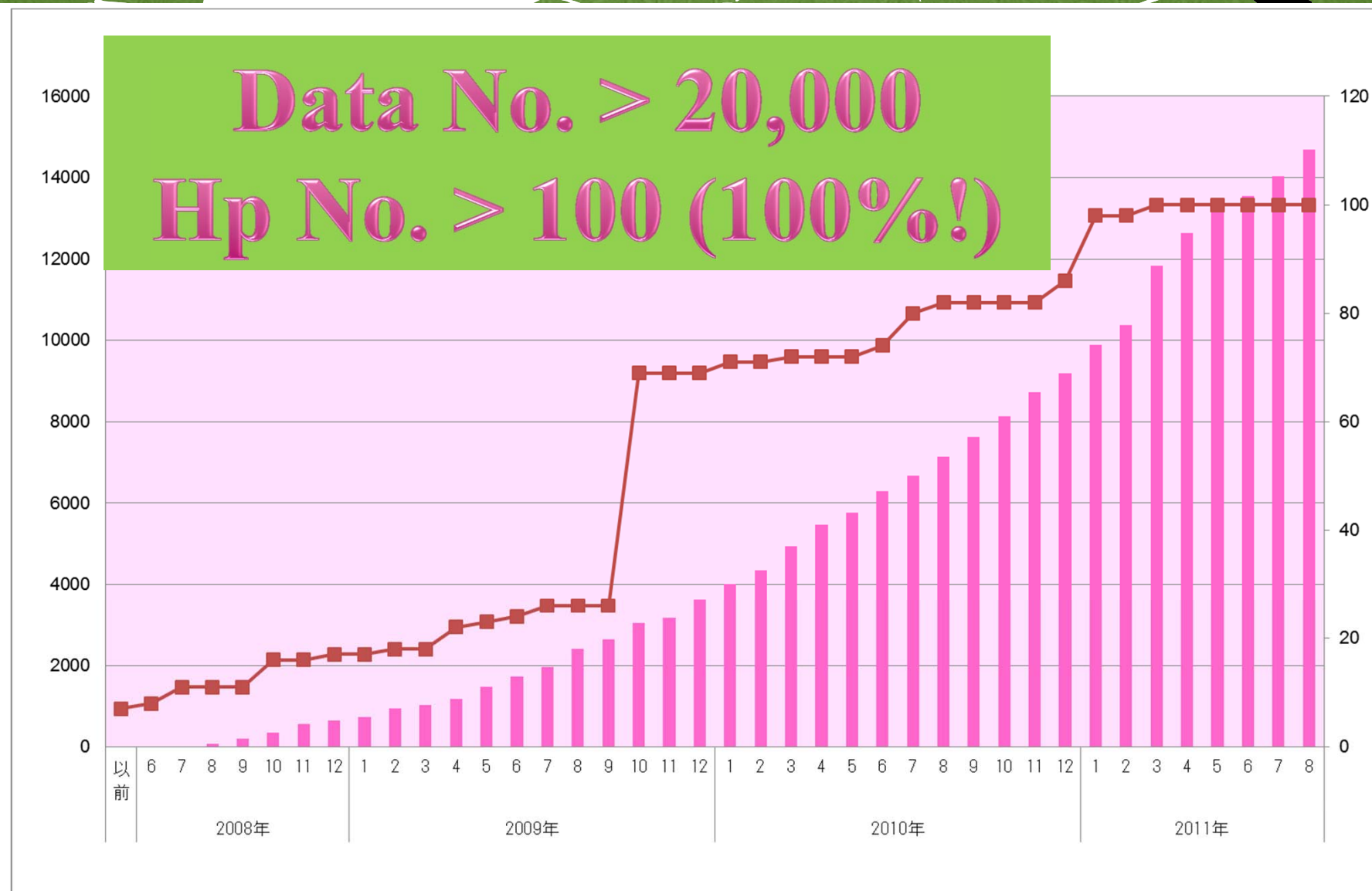


2013/04/05

21st ASCVTS in Kobe 2013

3

Cumulative Data Entry (Congenital)



Background

- ❑ Large databases have been growing up in several areas during the decades.
- ❑ Activity of cardiovascular surgery in Asia has been increasing.
- ❑ ASCVTS started the project of cardiovascular surgery database in Asian area through the ASCVTS Database Committee.

Databases in Asia

□ Nationwide

- Japan
- Thailand
- Saudi Arabia
- Korea

□ Single-/Multi- center

- Singapore
- Bangladesh
- China, Hong Kong
- India

ASCVTS Databases Committee

□ Nationwide

- Japan →→→→ **N. Motomura (Chair)**
- Thailand **H. Miyata, S. Takamoto**
- Saudi Arabia→ **H. Najm, K. Eskander**
- Korea→→→→ **C. Lim**

□ Single-/Multi- center

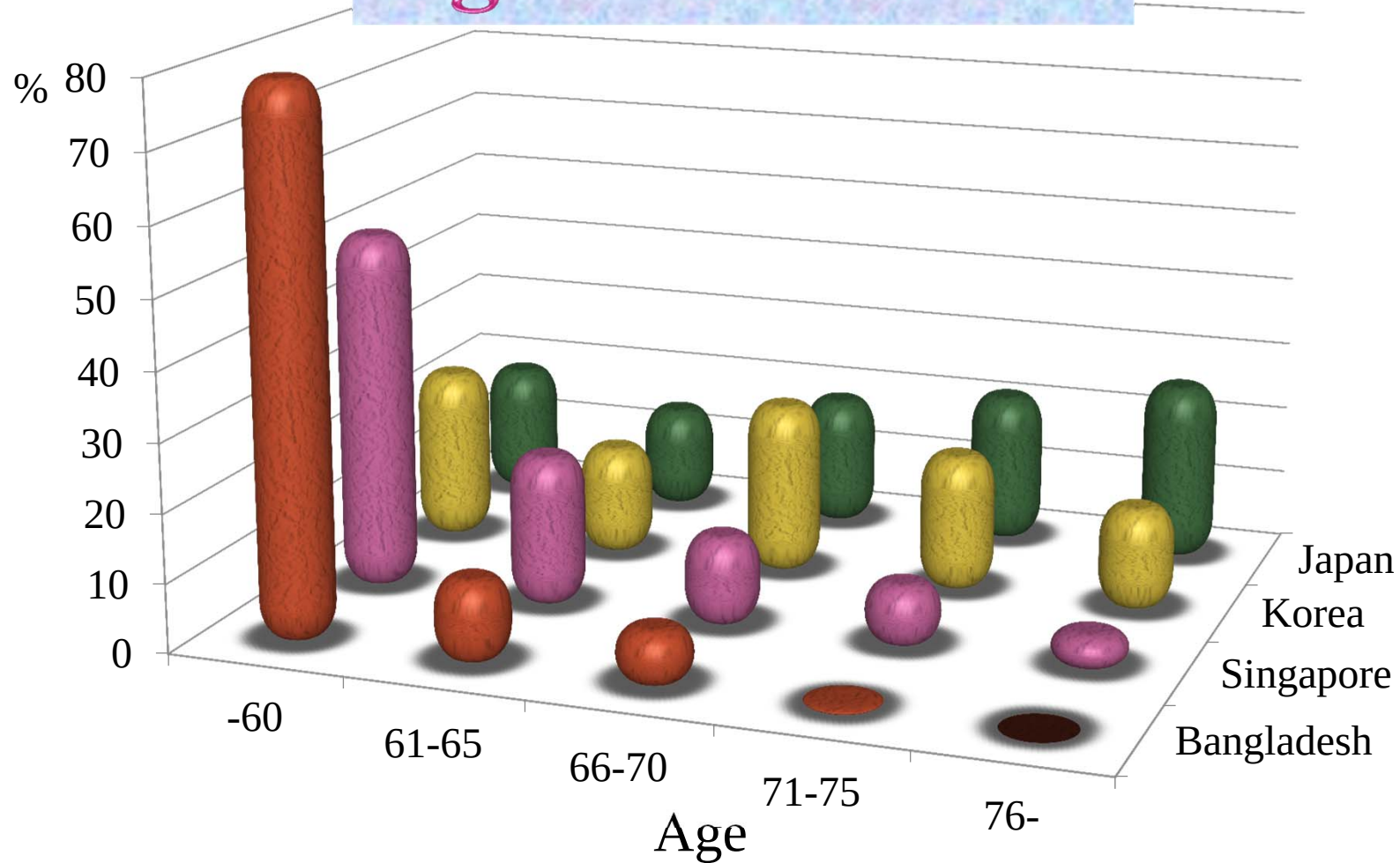
- Singapore→→→ **K. Teoh, CN Lee**
- Bangladesh→→→ **S. Ali**
- China, Hong Kong→ **S. Wan**
- India →→→→ **S. Kumar**

ASCVTS Database Committee Data Analysis Scheme

- ❑ Only preoperative information
- ❑ No outcome information
- ❑ Descriptive analysis
- ❑ Mainly 2011 cases
- ❑ Only isolated CABG cases
- ❑ Japan, Korea →→→ Nationwide analysis
- ❑ Singapore, Bangladesh →→→ Single center
- ❑ Compared with STS2008 (Annals 2009)

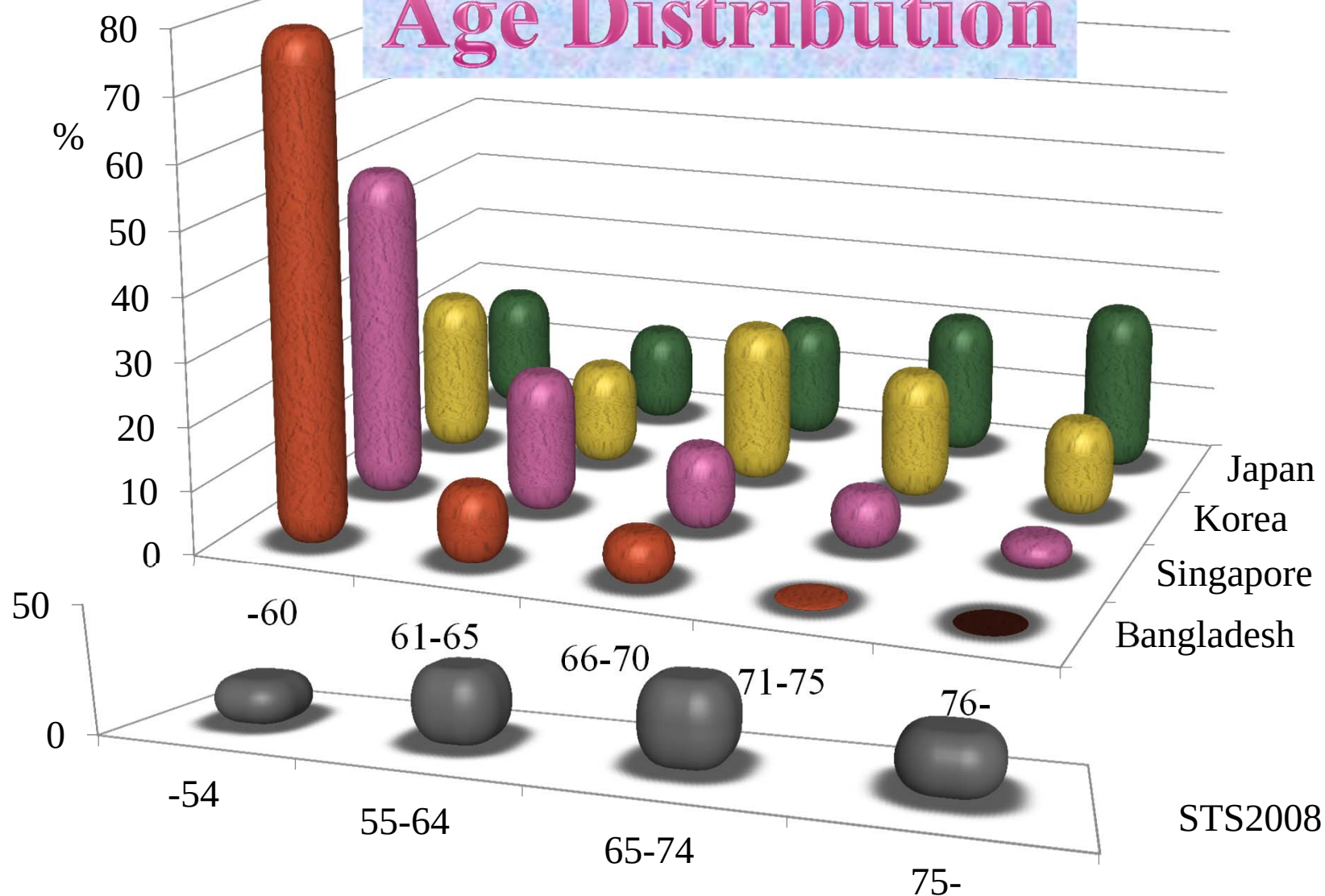
Basic Information, 2011

Age Distribution



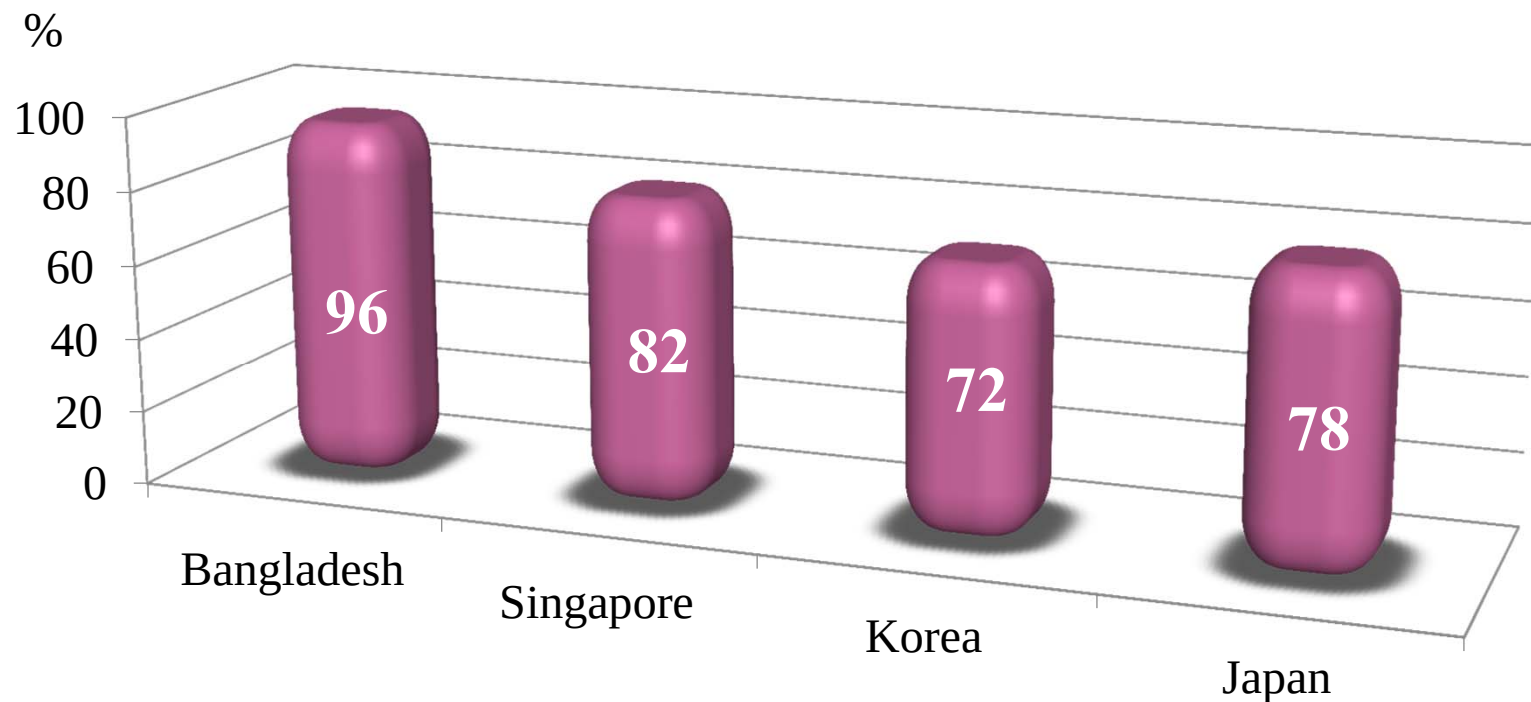
Basic Information, 2011

Age Distribution



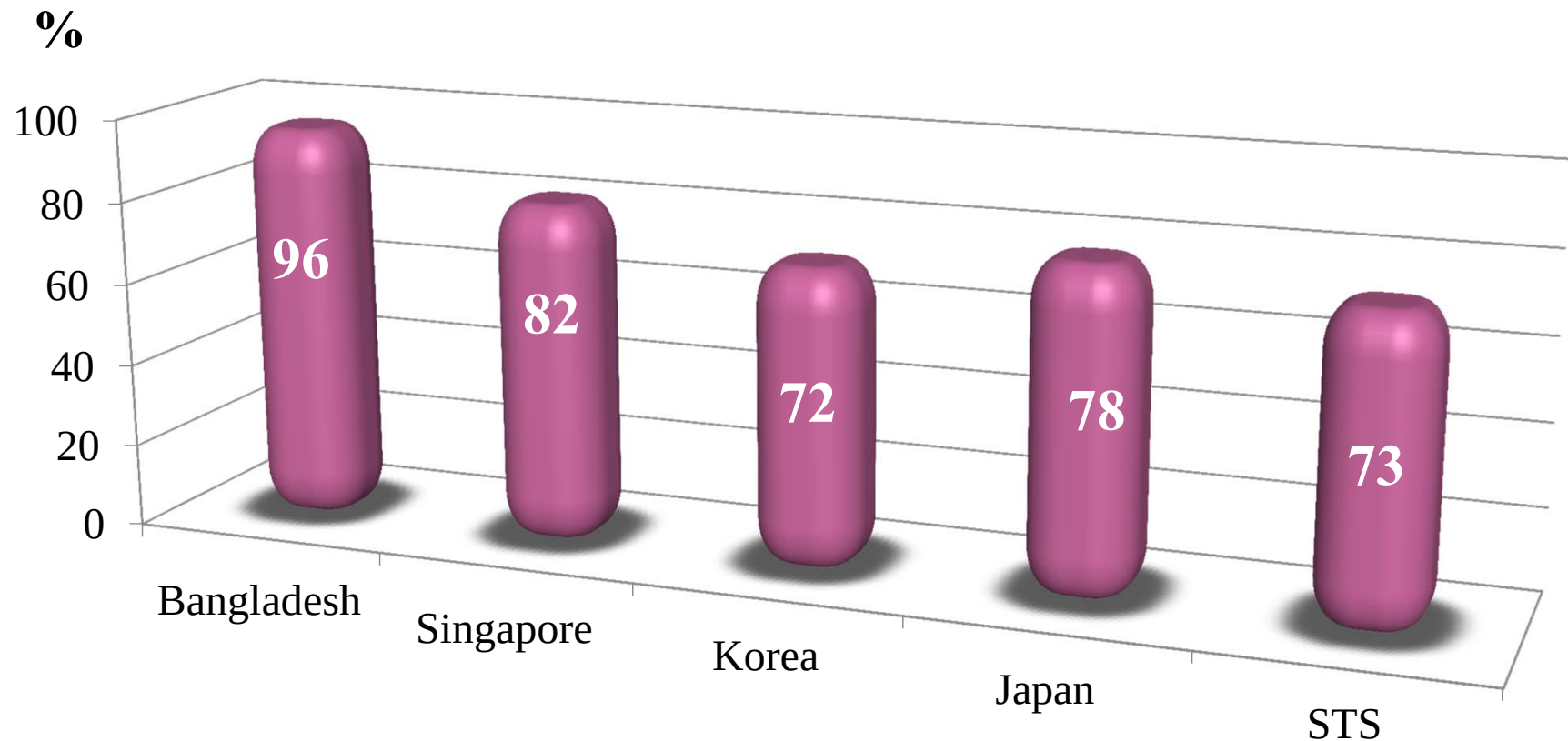
Basic Information, 2011

Gender (Male Patient %)



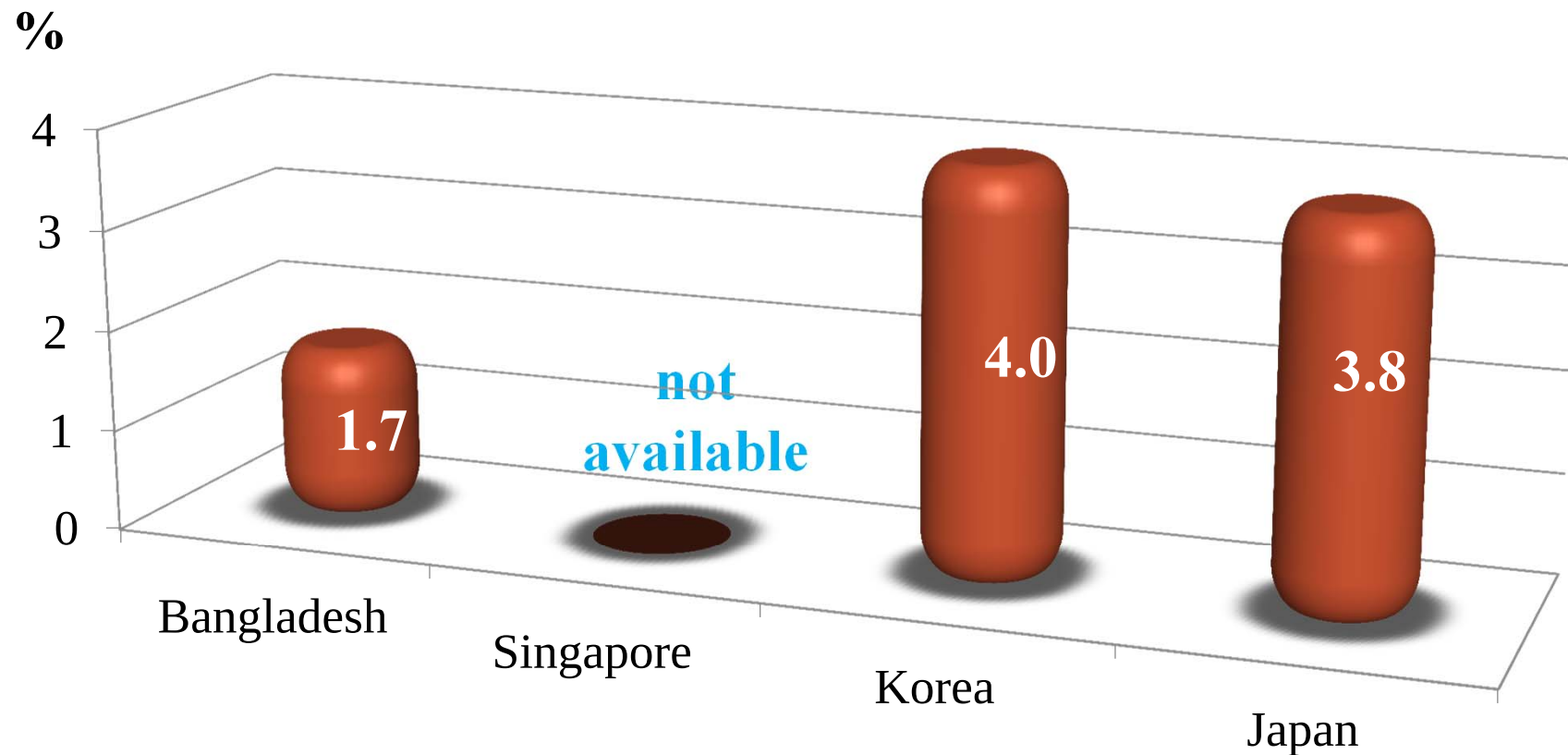
Basic Information, 2011

Gender (Male Patient %)



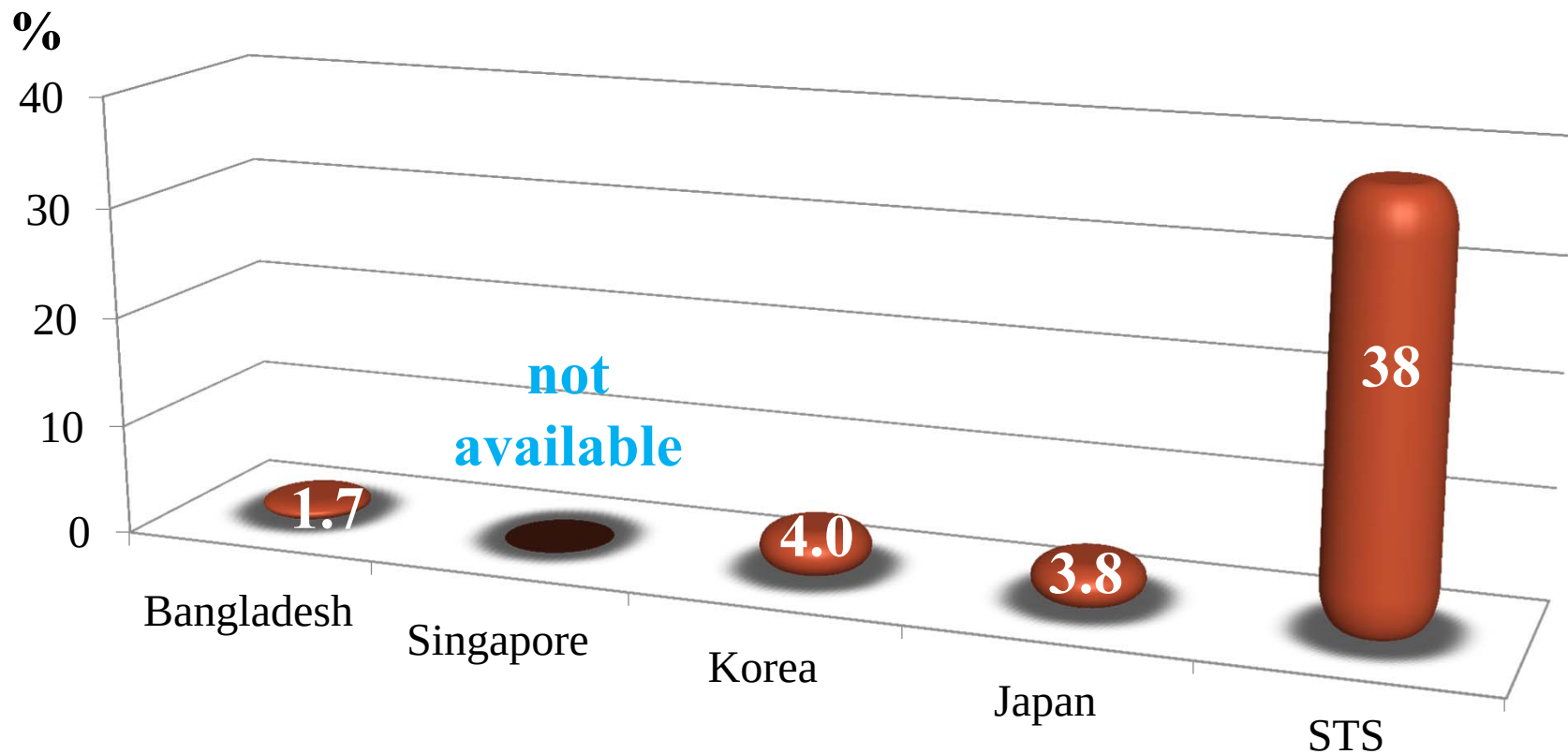
Basic Information, 2011

BMI > 30 (%)



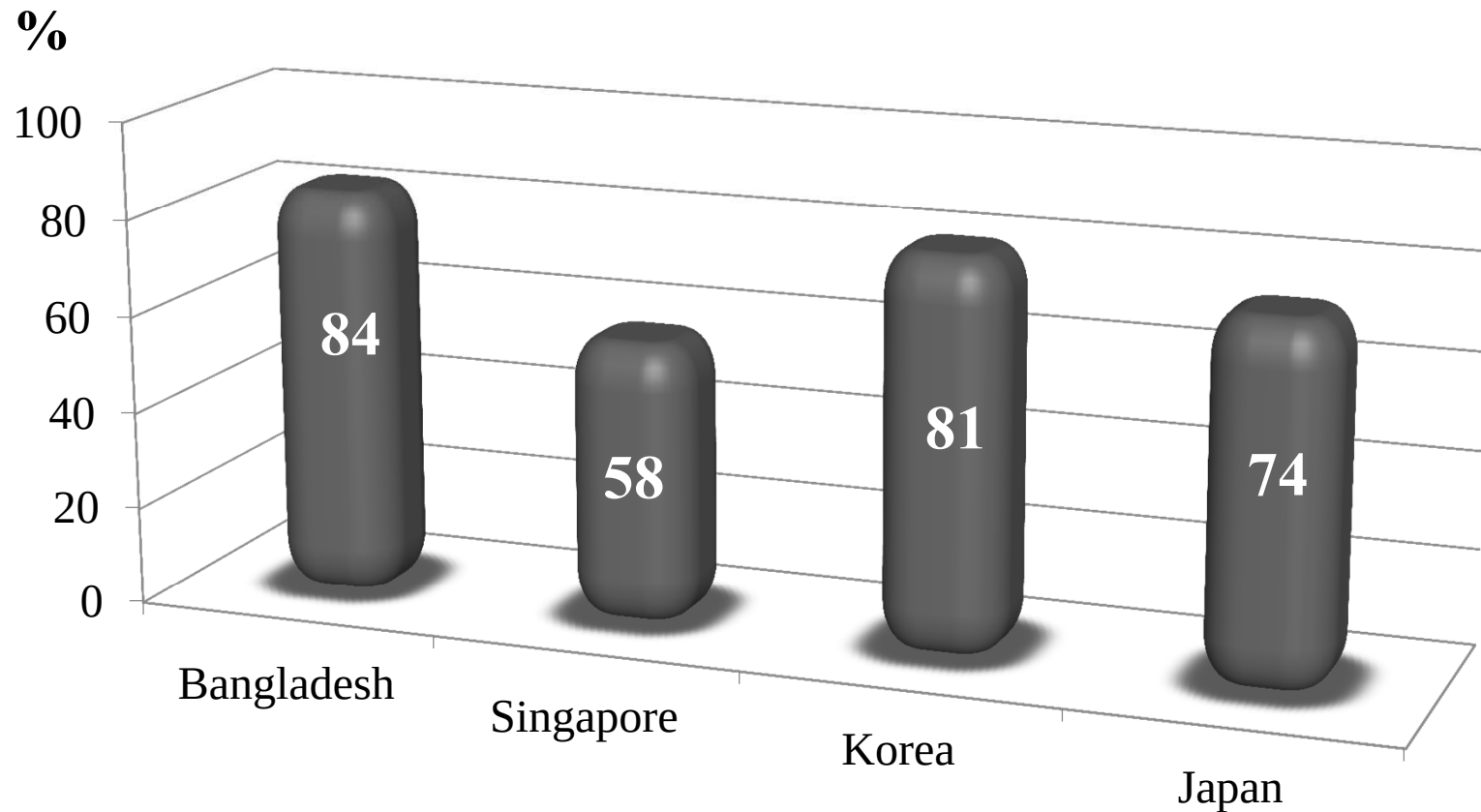
Basic Information, 2011

BMI > 30 (%)



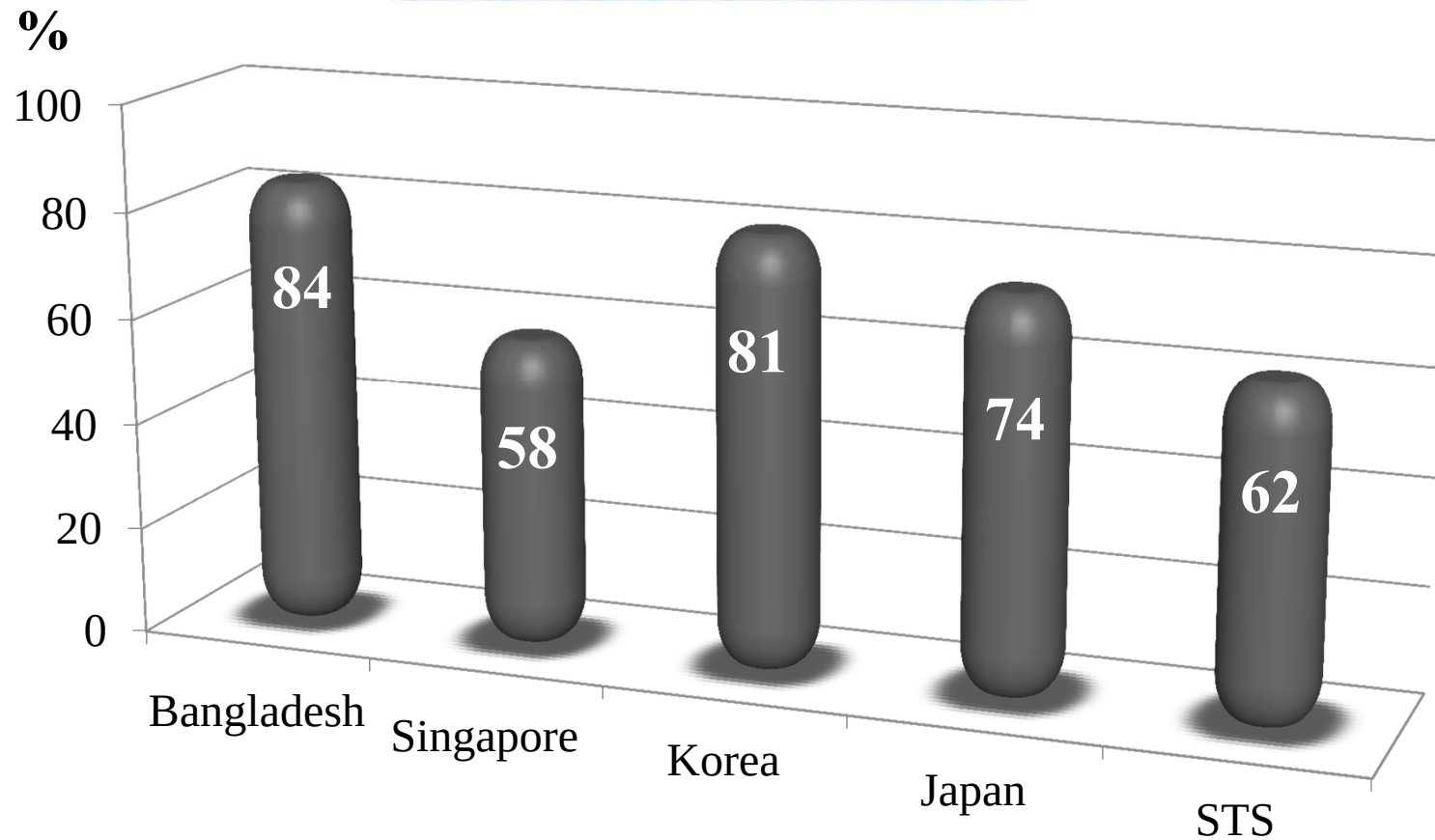
Basic Information, 2011

Smoker (%)



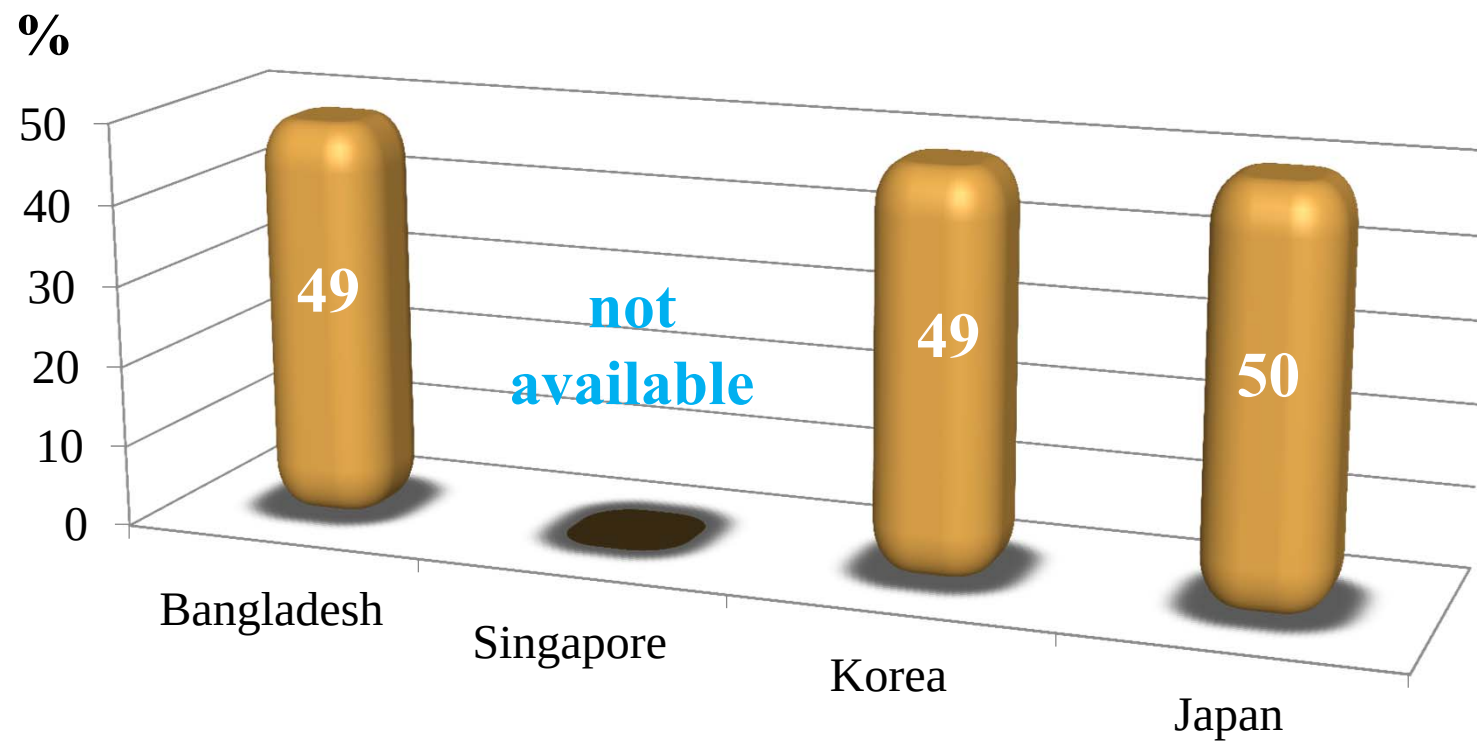
Basic Information, 2011

Smoker (%)



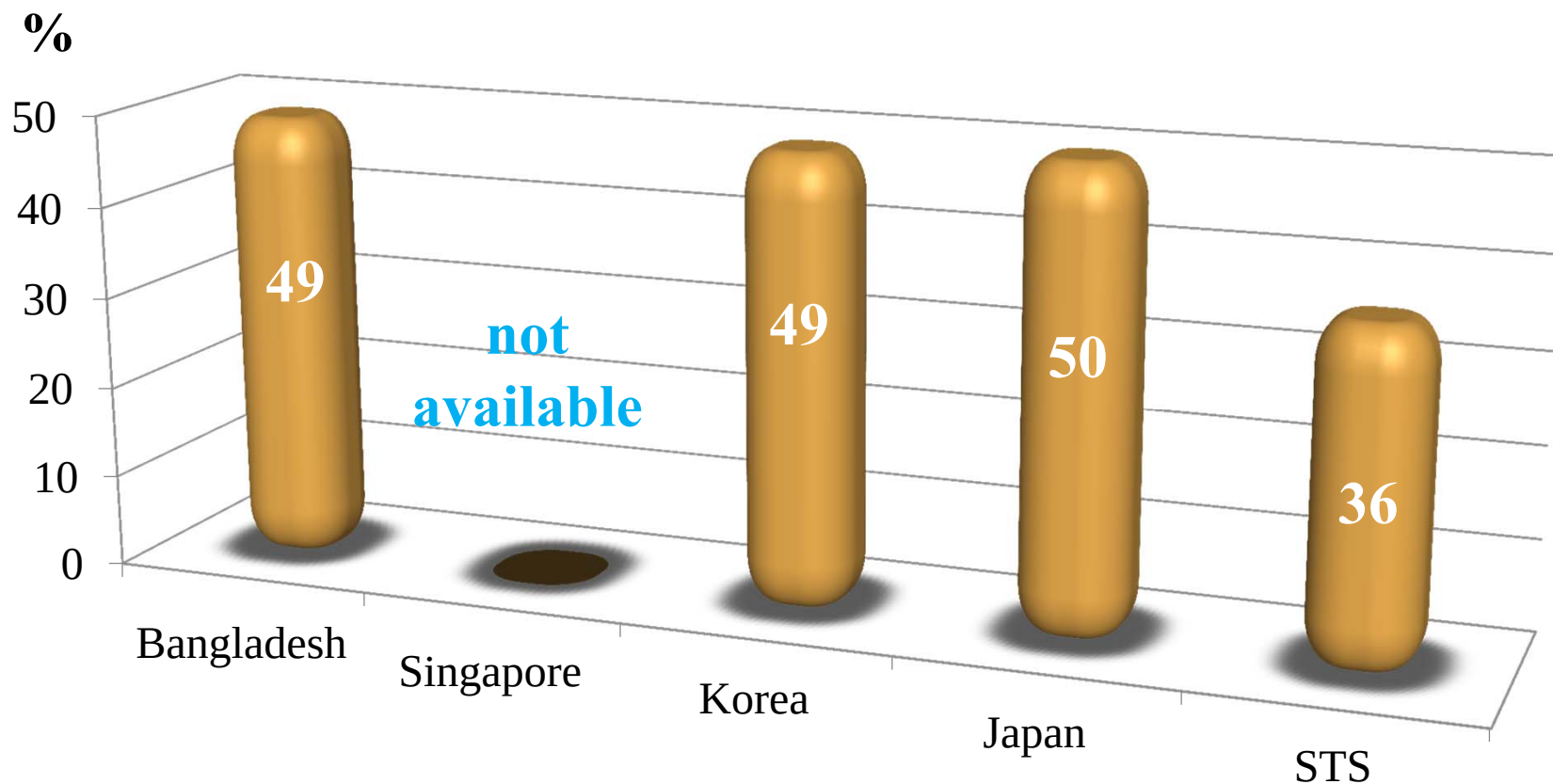
Basic Information, 2011

Diabetes Mellitus (%)



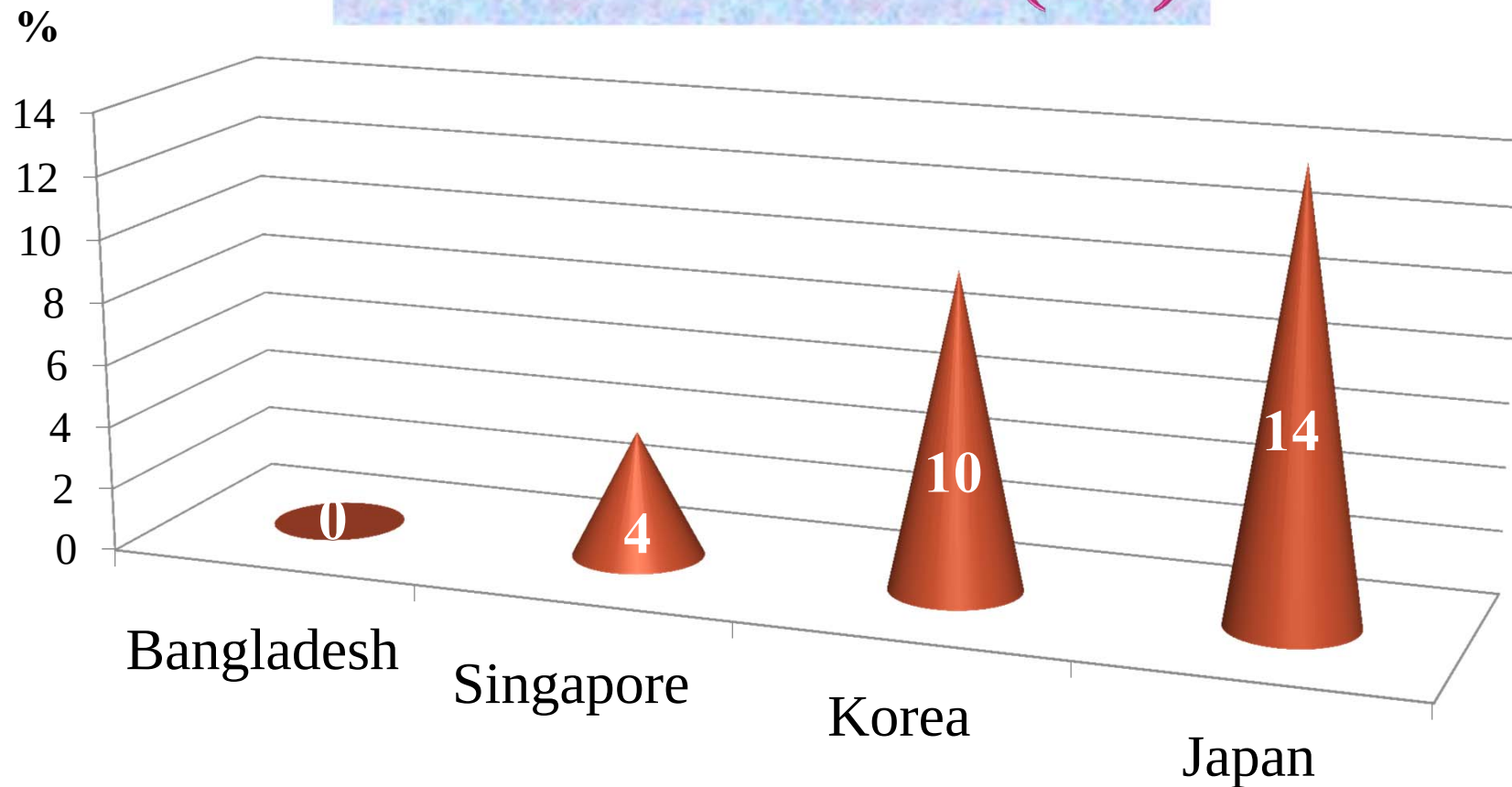
Basic Information, 2011

Diabetes Mellitus (%)



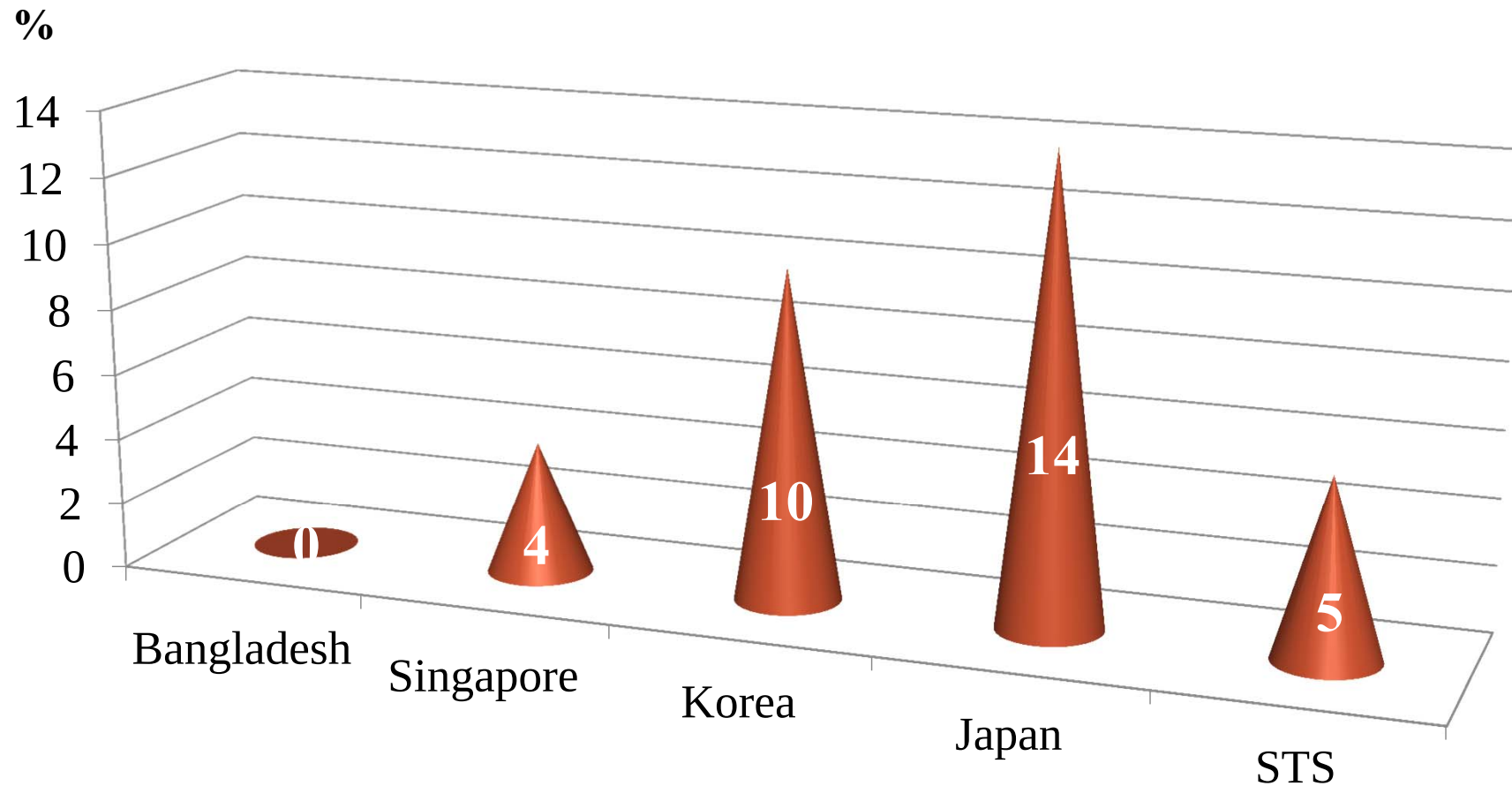
Basic Information, 2011

Renal Failure (%)



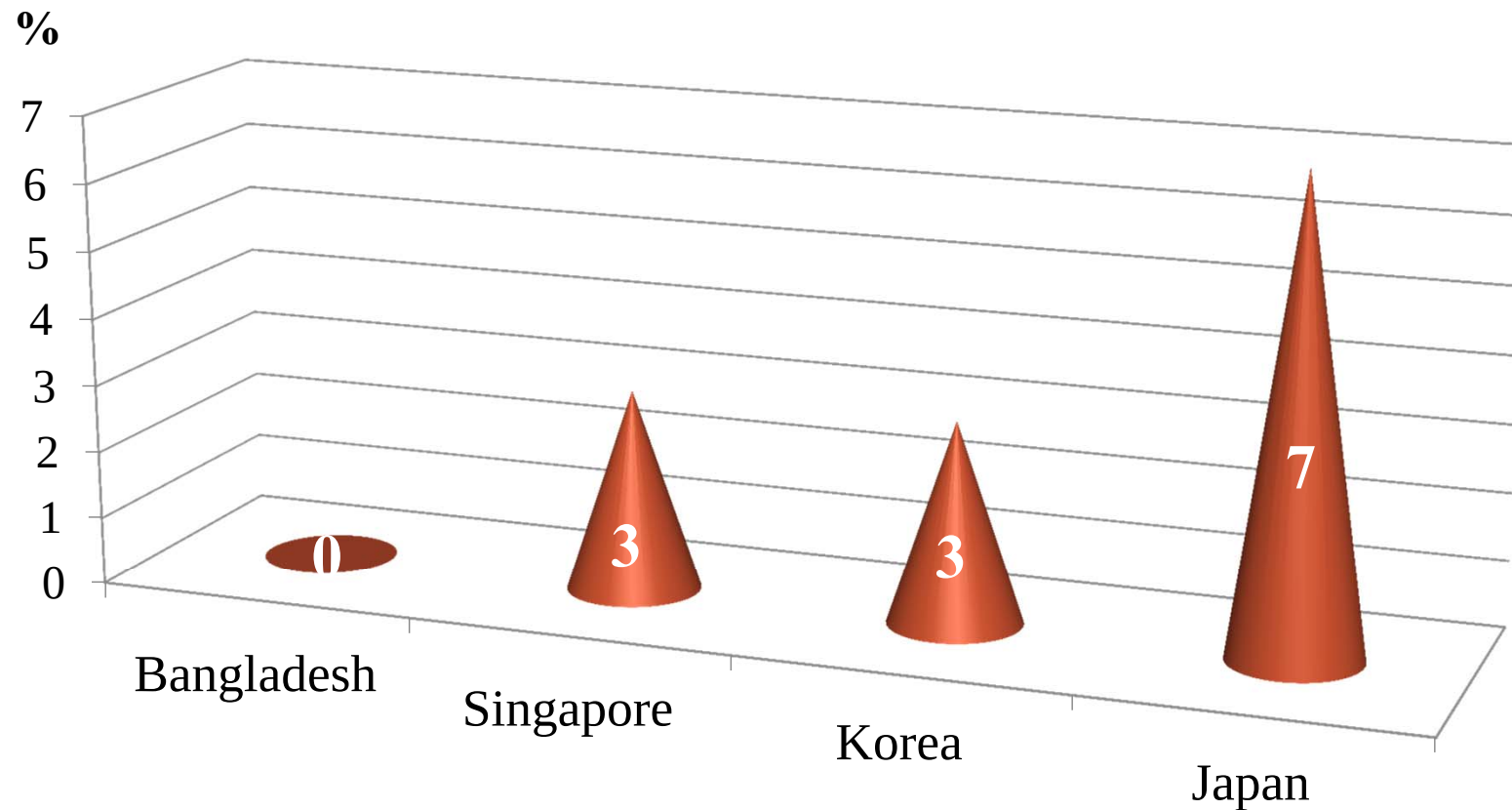
Basic Information, 2011

Renal Failure (%)



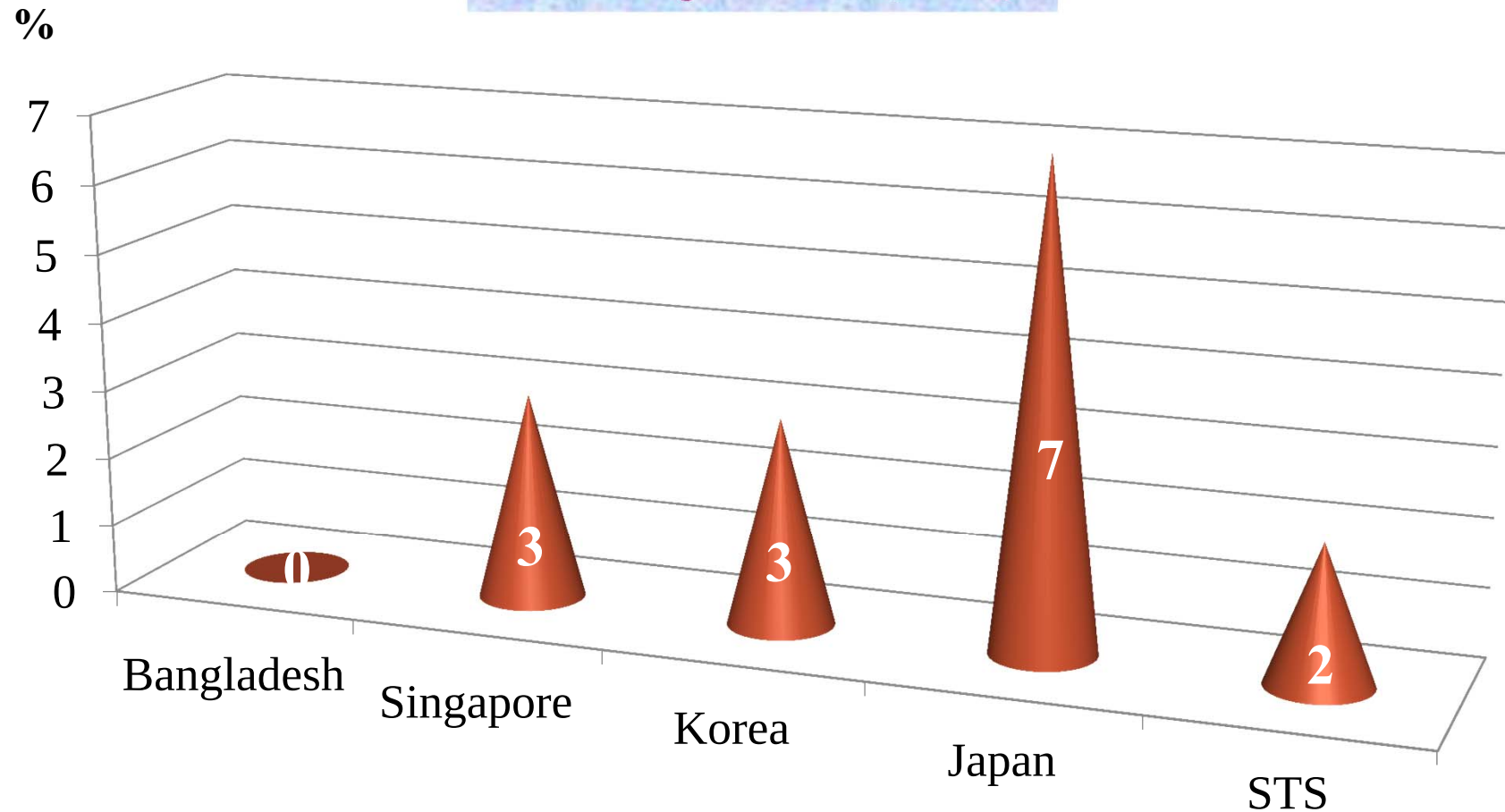
Basic Information, 2011

Dialysis (%)



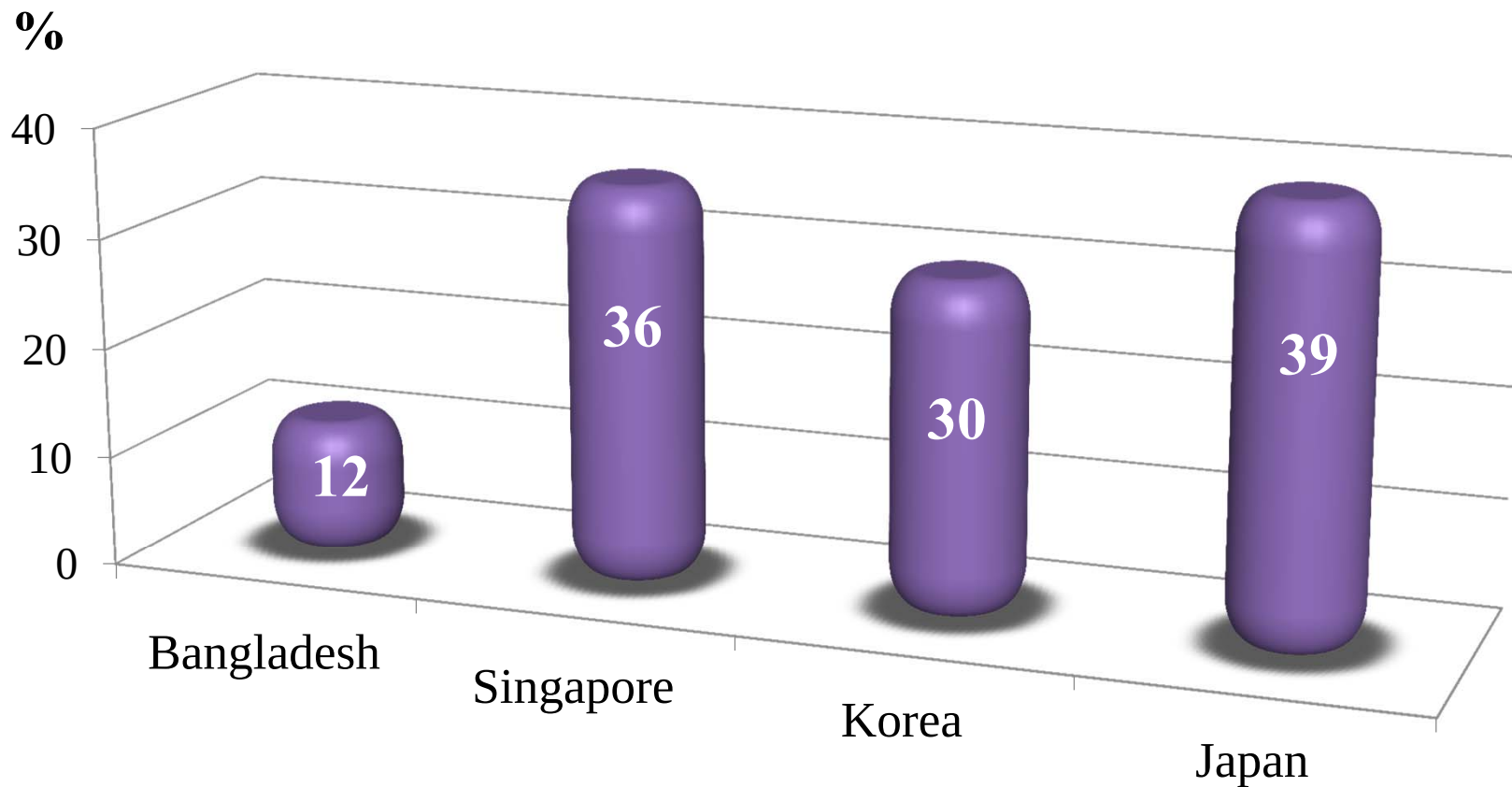
Basic Information, 2011

Dialysis (%)



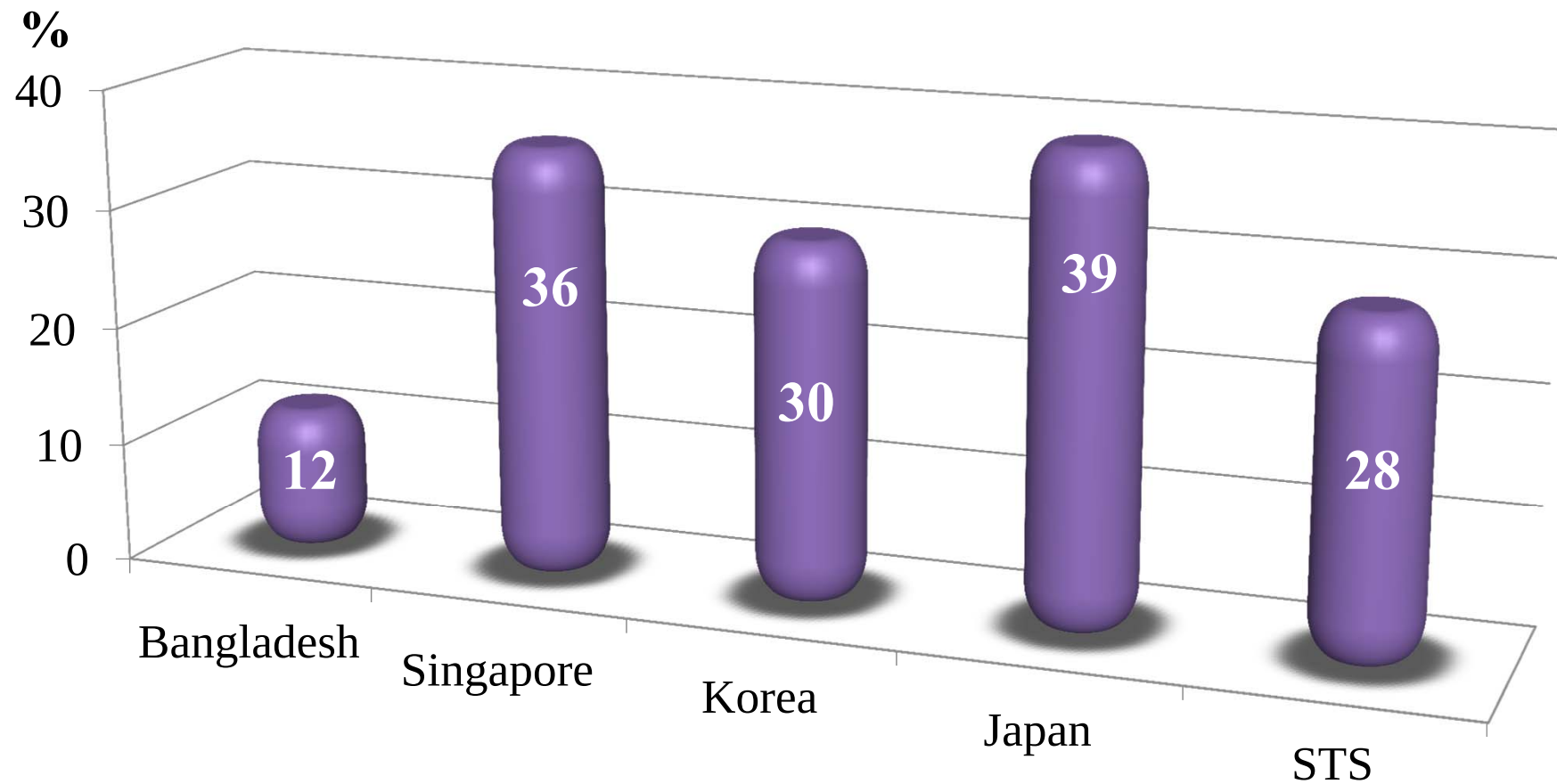
Basic Information, 2011

LMT (%)



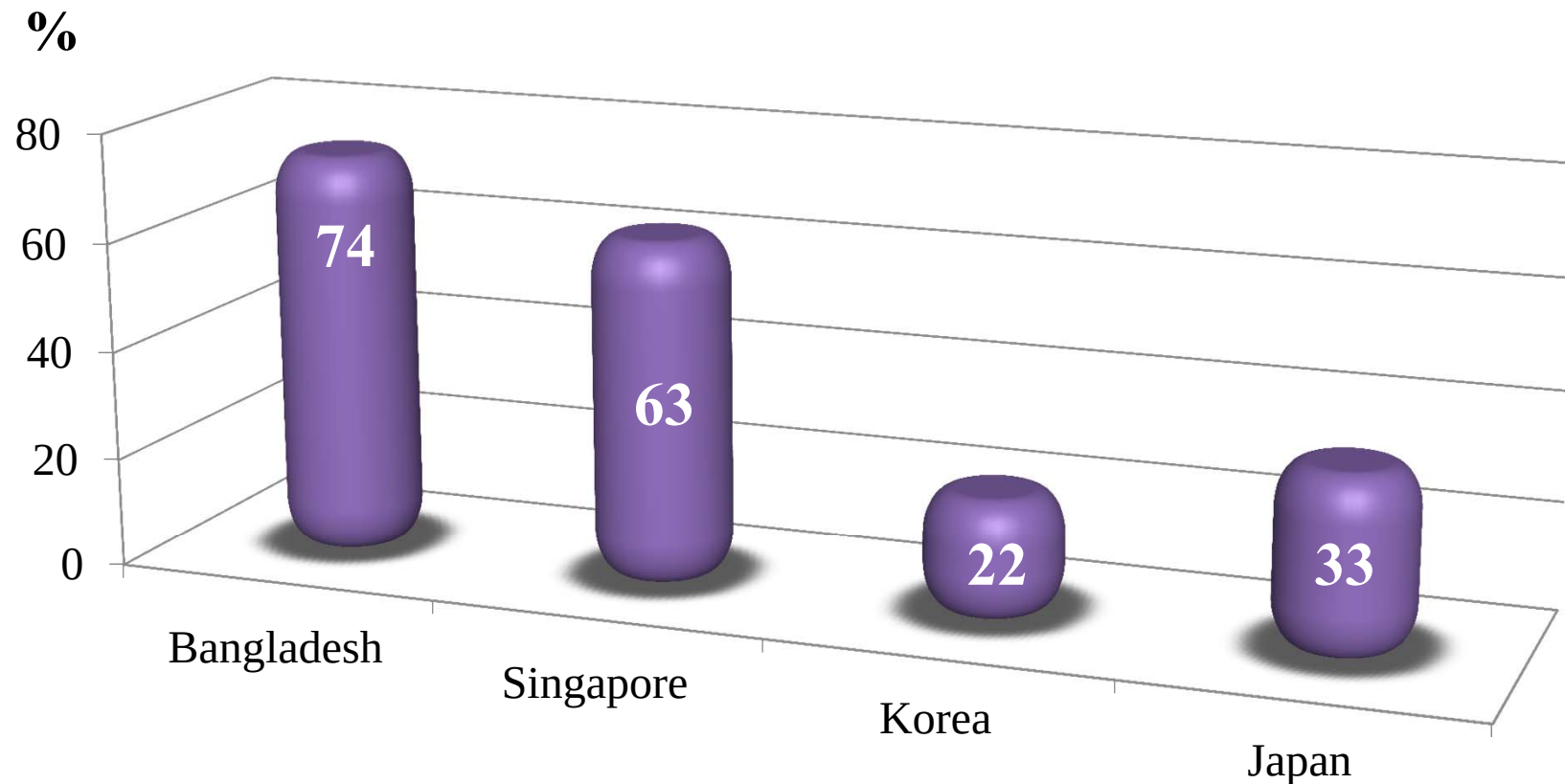
Basic Information, 2011

LMT (%)



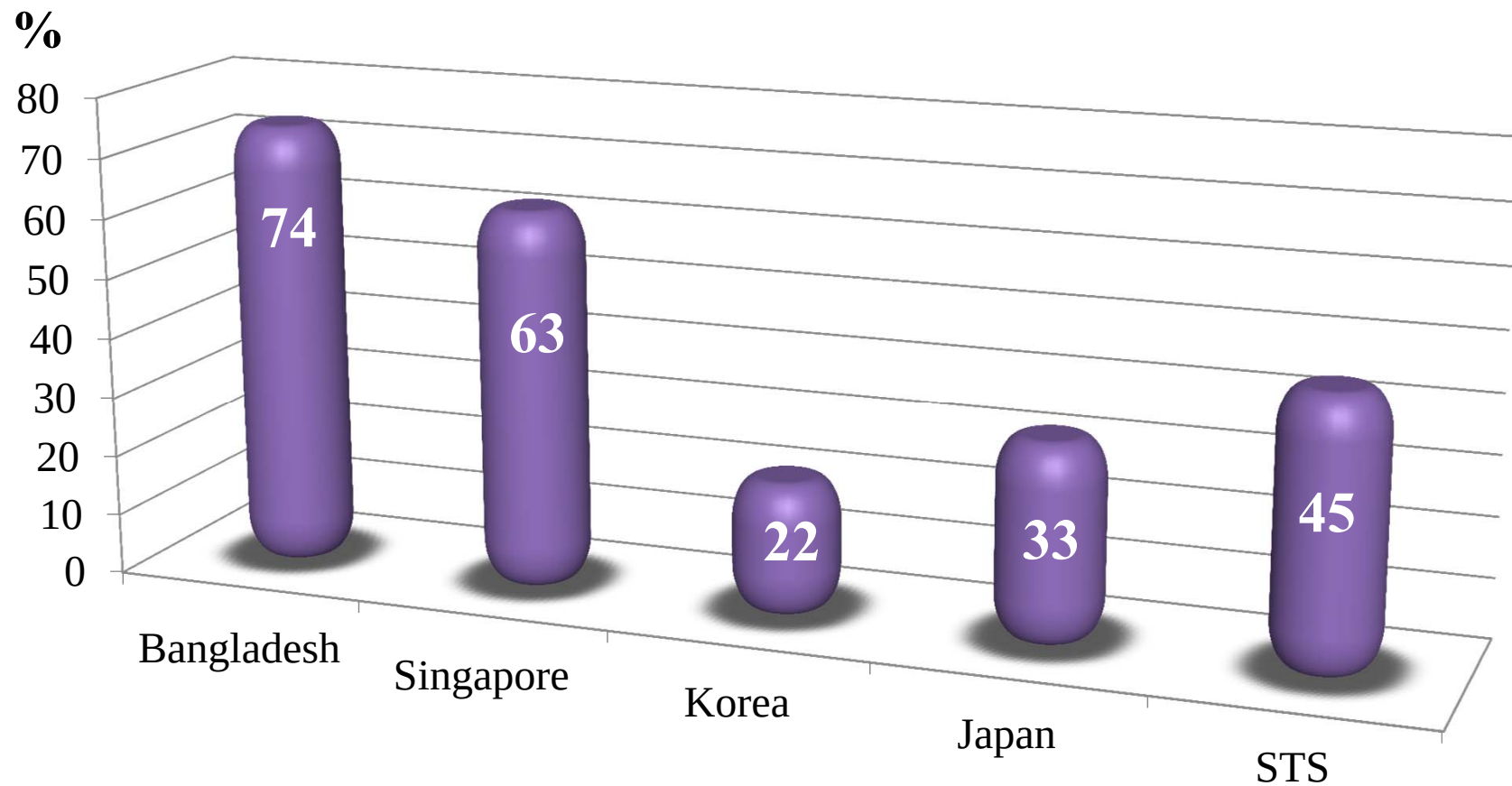
Basic Information, 2011

Myocardial Infarction (%)



Basic Information, 2011

Myocardial Infarction (%)



Difference of Operative Indication Korea & Japan

- ❑ Propensity model analysis.
- ❑ Not a propensity matched analysis.
- ❑ Analyze the difference of operative indication between Korea and Japan.
- ❑ Odds ratio $> 1.0 \rightarrow \rightarrow$ higher chance of surgery in Korea
- ❑ Odds ratio $< 1.0 \rightarrow \rightarrow$ higher chance of surgery in Japan

Chance of Operative Indication Korea > Japan

	Odds Ratio	P value	95% CI (lower)	95% CI (upper)
Urgent	6.735	< 0.001	5.671	8.000
Emergent	3.586	< 0.001	2.726	4.718
BMI > 23	1.602	< 0.001	1.362	1.885
Hx of Smoking	1.254	0.011	1.054	1.492
3VD	1.642	< 0.001	1.361	1.981
LV (med-bad)	1.269	0.004	1.079	1.493

Chance of Operative Indication Japan > Korea

	Odds Ratio	P value	95% CI (lower)	95% CI (upper)
Dialysis	0.322	< 0.001	0.214	0.486
Hyperlipidemia	0.419	< 0.001	0.358	0.491
MI	0.422	< 0.001	0.348	0.513
LMT	0.471	< 0.001	0.397	0.559
Reoperation	0.484	0.049	0.235	0.997
Male Gender	0.614	< 0.001	0.505	0.745
LV (bad)	0.696	0.034	0.497	0.973
Age (5-year)	0.799	< 0.001	0.760	0.841

Summary

- ❑ **CVS Databases have been growing up steadily in Asian world.**
- ❑ **ASCVTS Database: ASCVTS has started the project of CVS Database covering Asian world.**
- ❑ **Unique situation and diversity in Asian world will be clarified through the ASCVTS Database from now on.**