Effects of Health Labour Migration of low and mid-level health personnel for infectious disease control at the periphery in the Volta region of Ghana

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Outline

- Background
- Key challenges for Ghana
- Key questions
- Methods
- Results
- Conclusions
- Recommendations

Background

- Effects of migration have generated renewed interest in midlevel cadres as substitutes for internationally mobile health professionals.
- Cost effectiveness underlies their advantages to African health systems (Dovlo, 2004).
- Experience from other African countries prove they are capable of providing a wide range of health services

Background cont'

- Limited knowledge on their distribution, dynamics of supply and demand and involvement in service delivery in Ghana.

- Inadequate knowledge on the effects and implications of labour migration in rural areas and how it affects human resource policies and retention strategies

- As a consequence, these cadres are not appropriately factored into human resource planning and production in Ghana

Key challenges for Ghana

- High level of attrition of highly skilled health professionals
- Inequitable distribution of the remaining trained professionals most of whom are unwilling to work in rural areas.
- Not enough evidence that low and mid-level health personnel available are actually being retained & what factors influence their retention
- How many are actually involved in the provision of primary health care services in rural areas

Key Research issues

Phase I

- Conduct a situational analysis on low and midlevel cadres involved in the control and prevention of infectious diseases

Specifically, shed light on the midlevel cadre labour market…

- Categories to be produced,
- Migration patterns and categories most likely to be retained
- Examine the training, transfers and general mobility pattern
- Conditions of service and incentives

Phase II

- Identify factors that motivate their retention
- Effects of migration on infectious disease prevention, treatment and control

Methods

- Study site VR, covered period 2000-2005
- Qualitative and quantitative data covered a period of six years (2000-2005).

Phase I

- Desk Appraisal of key documents, global and national guidelines and treatment protocols
- Key informant interviews
- Quantitative data from Health Facilities, district, regional and national levels

Phase II

- Discrete choice experiment (226 cadres in all facilities in 10 districts)
- Key informant interviews with in-country migrants(25)
- Quantitative analysis of routine data from health facilities.

Training

Health category	Basic pre-service education	Length of training	Entry requirement
MEDICAL ASSISTANT	3 years (State Registered Nurse)	18 months	▪ SRN ▪ SRN Midwives
ENROLLED NURSE	4 years (Middle School)	2 years	▪ Middle School Leaving Certificate (MSLC)
COMMUNITY HEALTH NURSE	3 years (Secondary Education)	2 years	▪ Certificate Examination (SSSCE)
DISPENSING TECHNICIAN	3 years (Secondary Education)	3 – 4 years	▪ Certificate Examination (SSSCE)
TECHNICAL OFFICERS	3 years (Secondary Education)	3 years	▪ Certificate Examination (SSSCE) ▪ GCE ordinary and advanced level
HEALTH AIDE	3 years (Secondary Education)	4 months	▪ Certificate Examination (SSSCE)

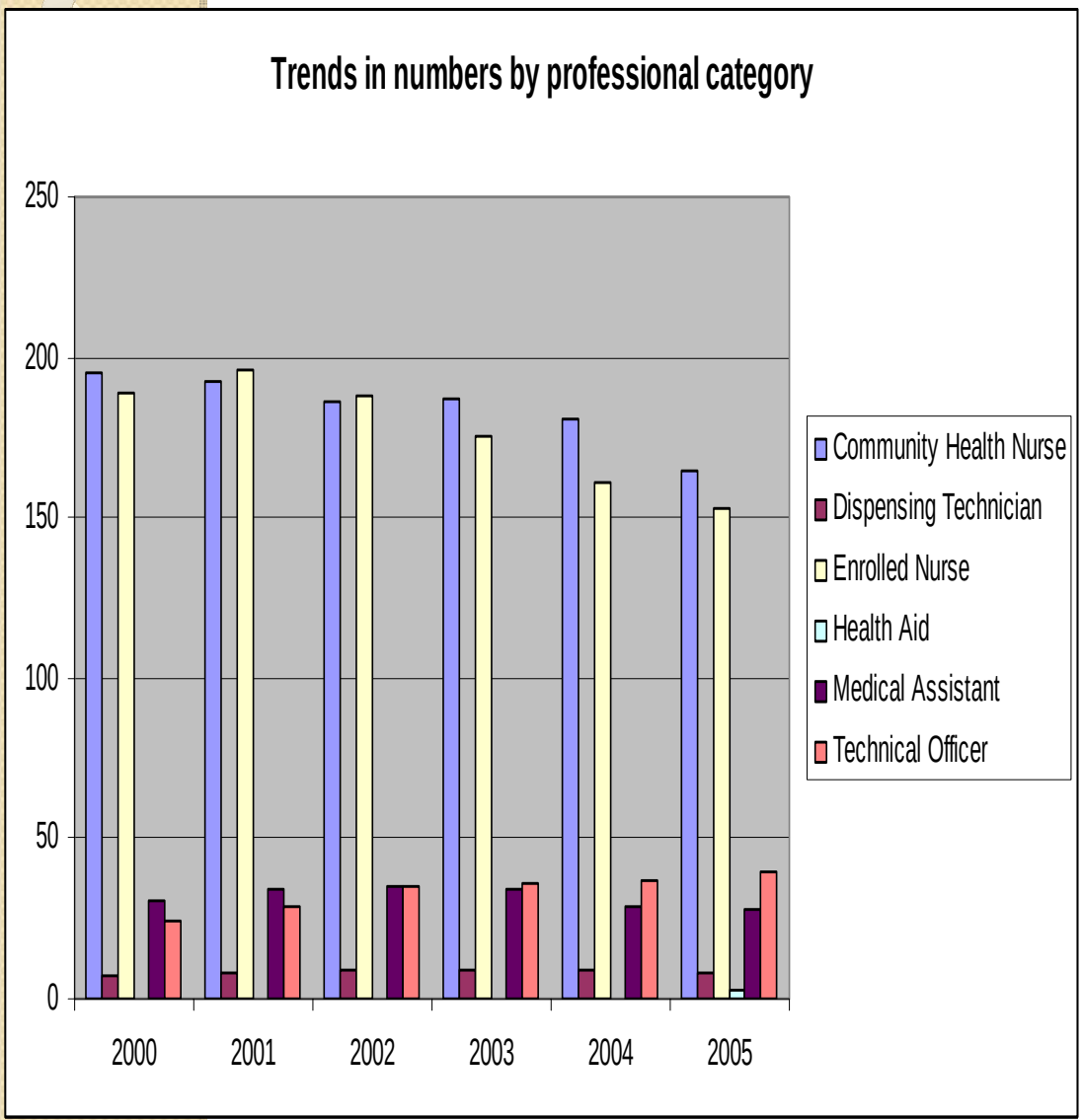
- Training since 1960s
- 15 training institutions
- CHN training colleges in all regions
- MA training since 1969
- EN program abolished in 1980s
- Training of multipurpose workers TOs in1990s
- Health aides training in 2000s

Numbers .. (2000-2005)

PROFESSION	FEMALE	MALE	TOTAL	%
Community Health Nurse (CHN)	1101	5	1106	42.3
Dispensing Technician (DT)	3	47	50	1.9
Enrolled Nurse (EN)	968	94	1062	40.6
Health Aid	2	1	3	0.1
Medical Assistant (MA)	109	82	191	7.3
Technical Officer (TO)	30	171	201	7.7
TOTAL	**2215**	**401**	**2617**	**100**

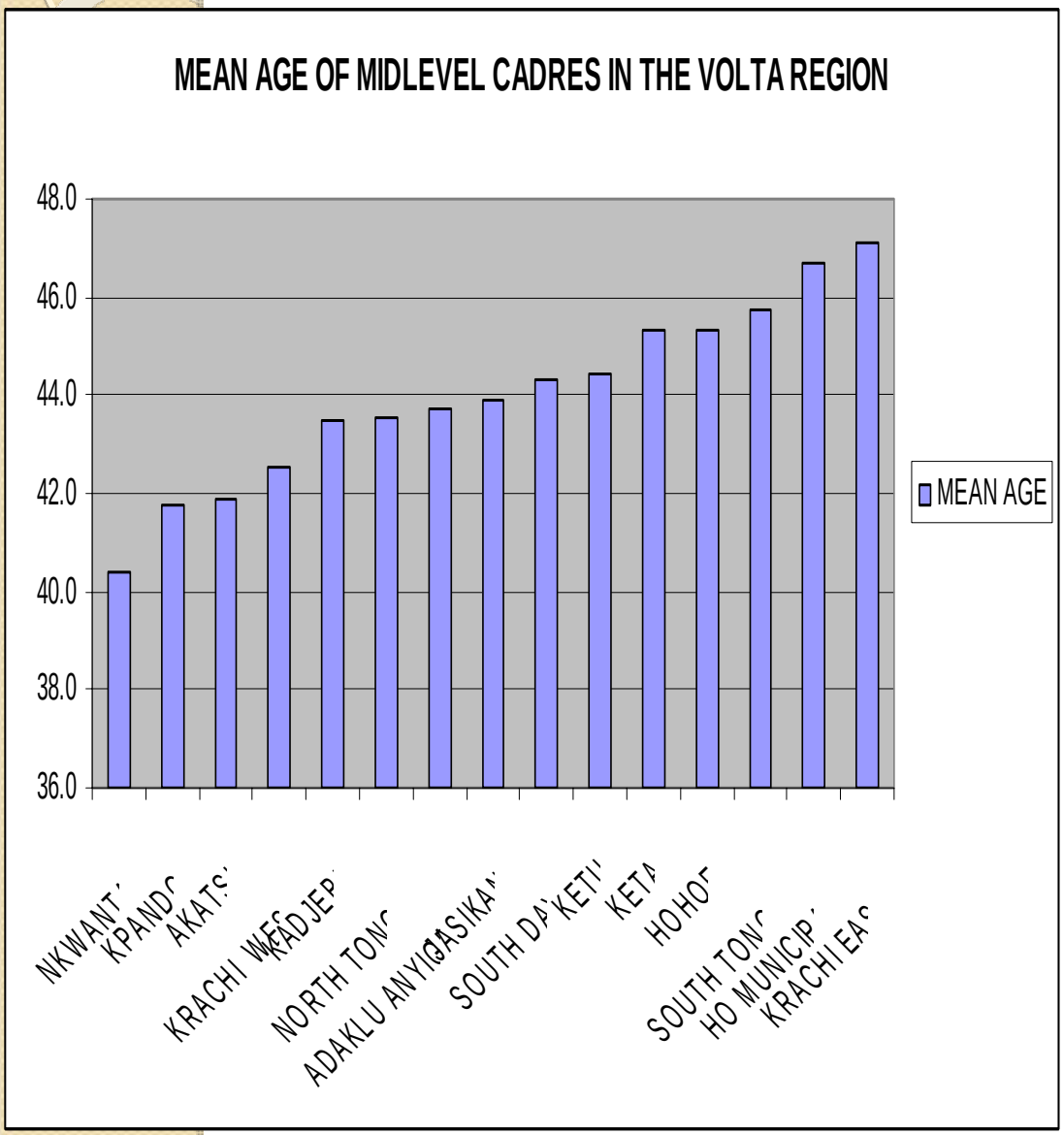
- Numbers inadequate due to…
  - National policies on recruitment and training
  - Rigid entry qualifications
  - Lack of clear career progression paths
  - Focus on training of professional cadres
  - In 2003, produced 200 Drs and 848 nurses as against 38 MAs and 421 CHNs
  - Underfunding of training institutions

Trends in numbers



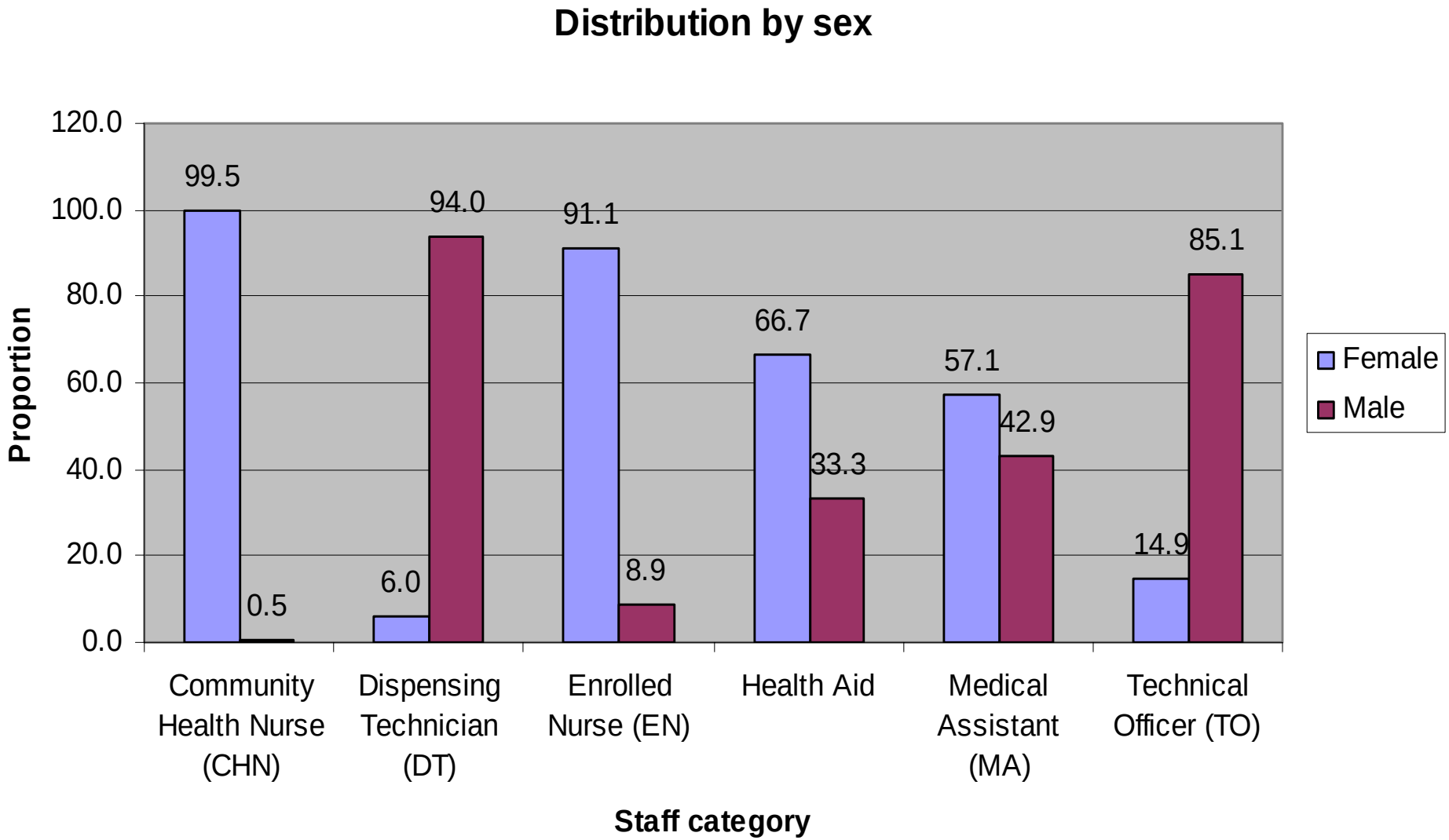
- Numbers of midlevel cadres on payroll is inadequate and steadily declining since 2001.
- The implication is that not only are we loosing our trained health professionals but also the midlevel cadres to different forms of attrition.

Mean age

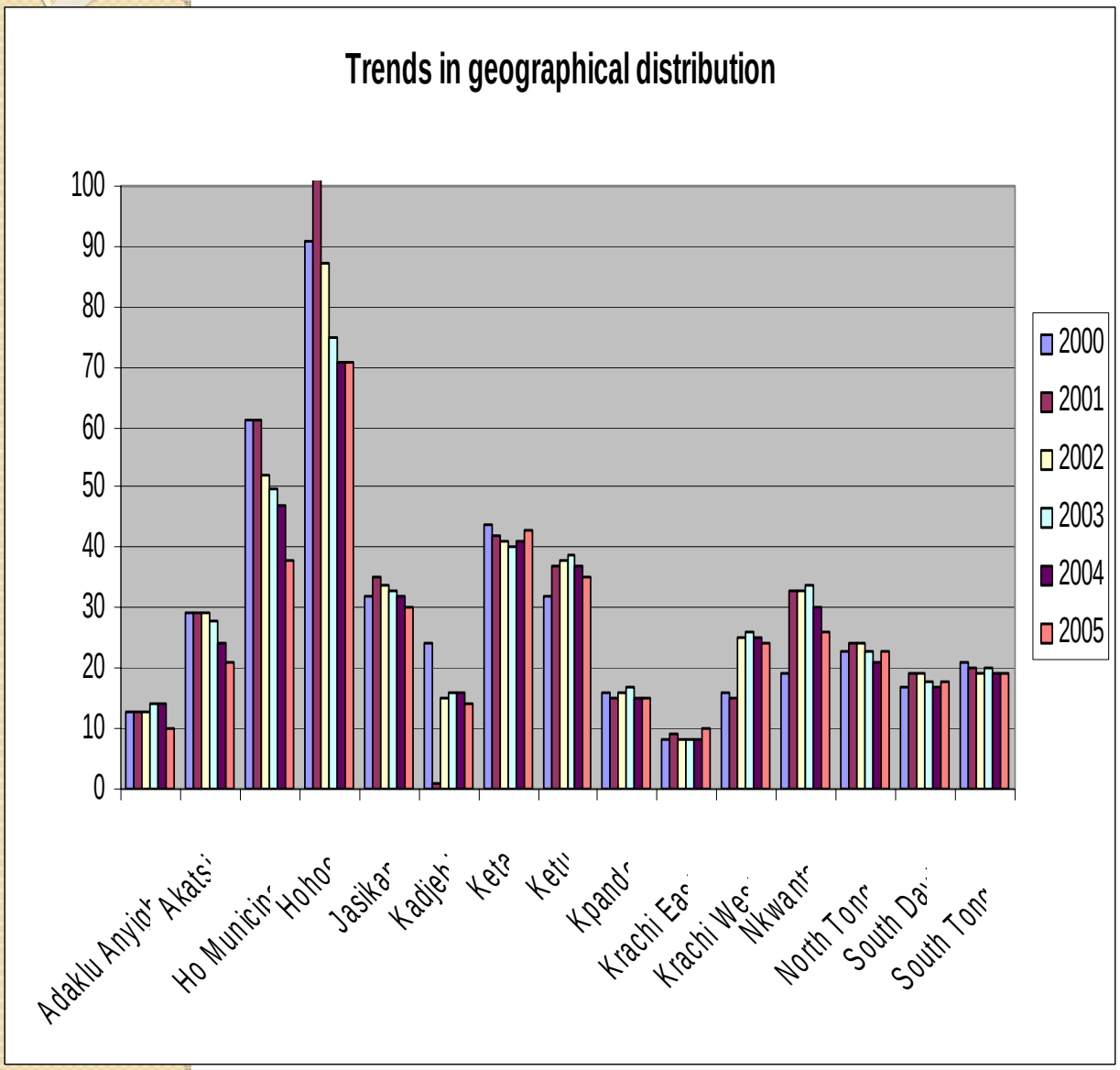


- Ever increasing ageing midlevel cadre workforce
  - Average age of midlevel cadres 44 yrs
  - Medical assistants mean age of 57 yrs
  - Dispensing assistants mean age of 52

Distribution by sex

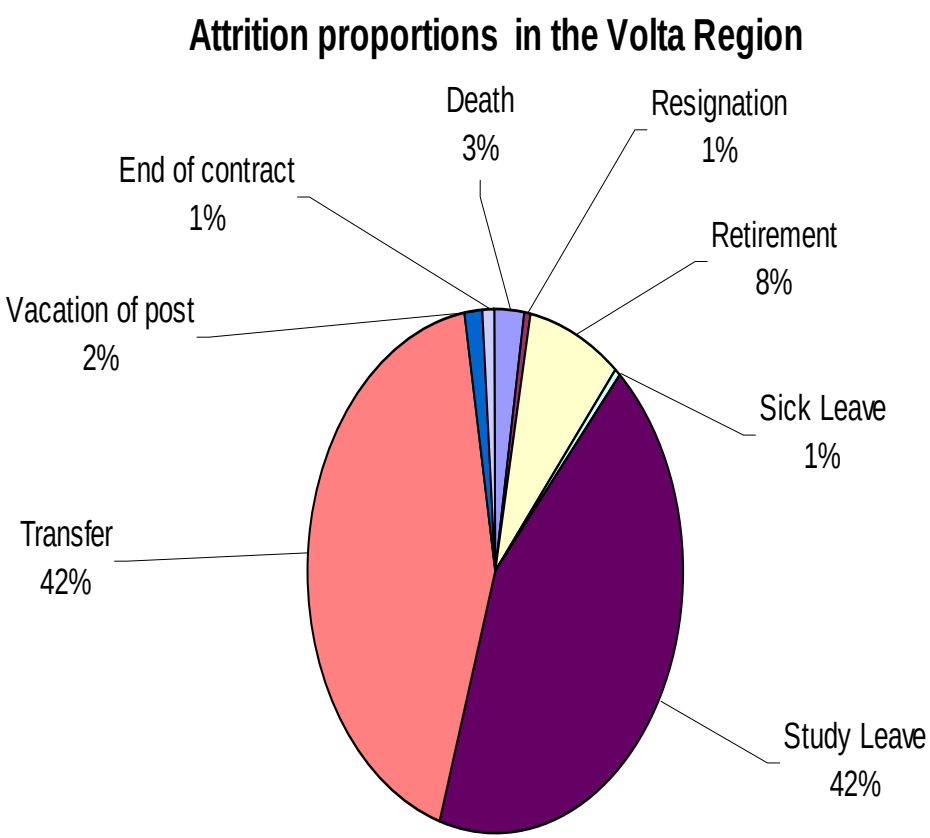


Trends in geographical distribution



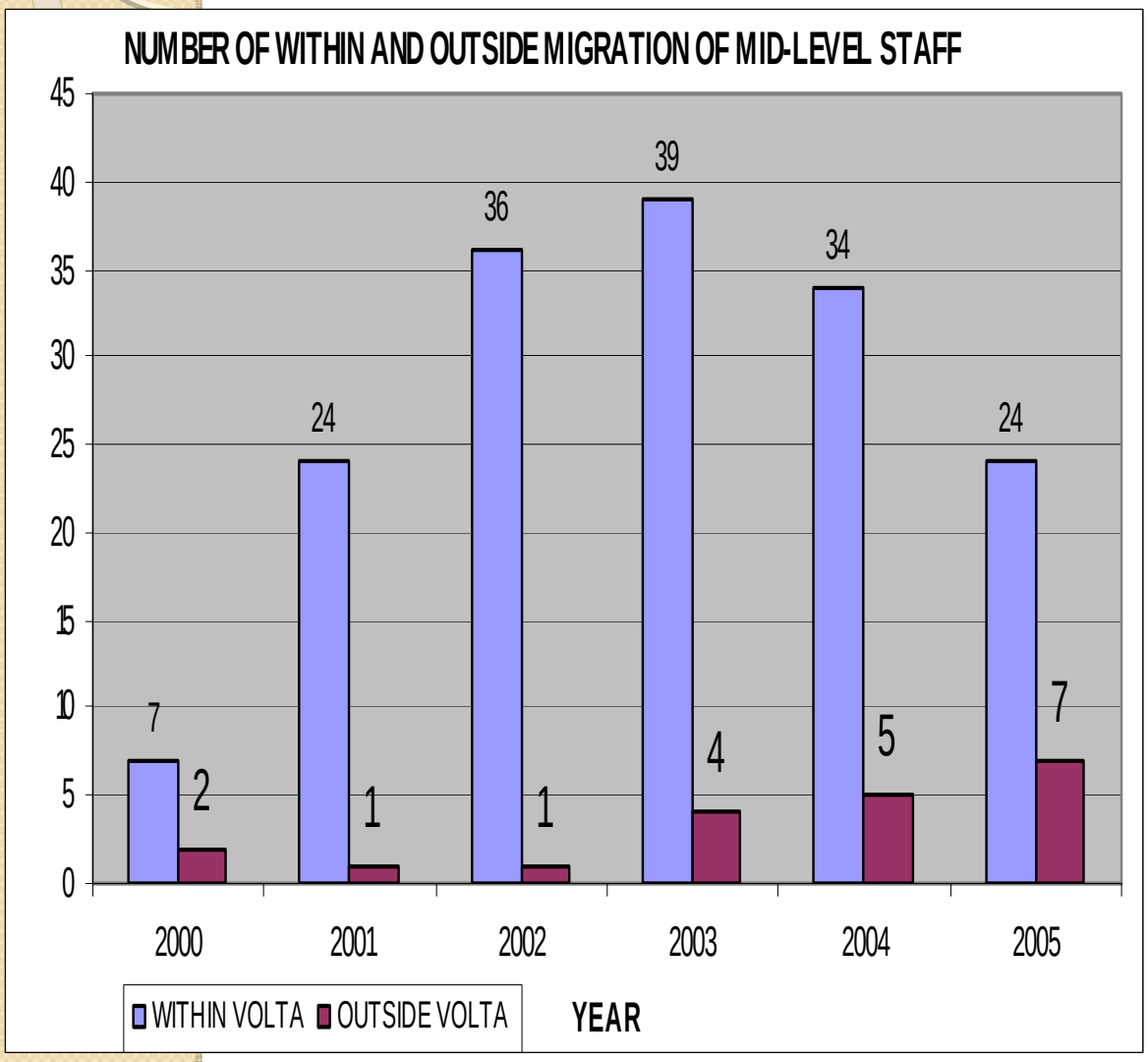
- Inequitably distributed just as trained professionals
- Prefer and actually concentrated in urban and peri-urban towns typical of professional cadres

Attrition of midlevel cadres



- VR lost 8% of midlevel cadres to attrition in 6yrs
- 84% due to study leave and transfers leading..
  - Under coverage of services
  - Poor supervision and mentoring
  - Compromised quality of care

Migration



- Internal migration is decreasing
- External migration though small is on the increase
- Nursing category is most migrant

Motivation and incentives

Staff category	Monthly allowance Cedis	US Dollars
CHN	¢229,000-356,000	$24-37
EN	¢424,000-560,000	$45-58
Midwives	¢356,000-560,000	$37-58
SRN	¢374,000-421,000	$39-44
Nursing officer	¢430,000-1,095,000	$45-115
Technical officer	¢352,000-582,000	$37-61
Doctors	¢948,000-1,350,000	$99-142

- Only 8% of midlevel cadres benefited
- Skewed towards medical assistants and EN
- Poor implementation of incentive package
- Per capita payments ranged between $6 -$340.
- Meager and ineffective in motivating staff

Factors affecting retention- Results of Discrete Choice experiment using a Random effects Logit model

Attributes	Effect	95%CI	P-value	Value of attribute
Income (salary +Benefit)				
Same	1	Ref		
30% increase	0.01	0, 0.01	<0.0001	1
Doubling	1.95	0.60, 6.32		
Social Amenities	7.83	3.75,16.35	<0.0001	4.02
Equipment	0.06	0.03, 0.13	<0.0001	0.03
Workload	0.03	0.02, 0.06	<0.0001	0.02
Good governance and management	56.76	29.16, 110.38	<0.0001	29.11

Factors cont' – Key informant interviews with migrants

- Family issues
- Poor recognition, lack of promotion and opportunities for further training
- Limited opportunities for career advancement
- Poor supervision from superiors
- Inadequate pay

Effects of migration

- On infectious disease control activities
  - Utilization
  - Quality
- On health providers
  - Increased workload leading to reduction of time per patient
  - Take on additional tasks
- On community
  - Patients don't receive quality time from HW
  - Long waiting times leading to…
  - Alternative care seeking

Conclusion

- Play a significant role, capable of taking on additional tasks outside their areas of training.
- Numbers are inadequate, inequitably distributed and steadily declining due to different forms of attrition - utilization and quality of care
- Midlevel cadre training serves as a stepping stone to professional training due to lower entry qualifications
- Financial and nonfinancial factors work against retention
- Current Incentive package ineffective in motivating and retaining midlevel cadres

Recommendations

- Address factors influencing attrition as a basis for formulating retention policies and strategies.

- Policies regulating medical and nursing practice should address issues relevant to mid-level cadres including scope of practice, promotion, entry qualifications and professional development
  - Reduce barriers to entry
  - Continuing education and supervision - IST
  - Improve facility management

- Policy decision on the most efficient skill mix and numbers of health workers to train to achieve the desired coverage of health interventions

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