

A job analysis of selected health workers in a district health system in KwaZulu-Natal

Part three: Other categories of health workers

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Abstract

This article described the third part of a study aimed at doing a job analysis of nurses and non-professional health workers in a district health system. This article describes the tasks of five categories of workers, their training and their work-load over an ordinary week.

Interviews were done with 52 workers from three hospitals and five clinics, of whom 14 were men and 38 women. The three PHC guards had a much more varied job than the hospital security staff (also three). All of them have had specific task related training. The six General Assistants in Primary Health Care settings were almost exclusively involved in cleaning, while the 23 in hospitals added food and drink management and running errands to their

work. Only one had training pertaining to the specific tasks. All three clerks were found in the PHC setting, and their tasks were mainly that of receptionist. None had specific task related training. The three Ground's Men worked at gardening and cleaning at PHC clinics, but a range of other tasks were added from time to time. Porters, of whom ten were interviewed, did mainly transporting of patients and running errands. GA's and security staff were also used to control violent patients and visitors, something for which none of them have had training.

Recommendations were made about training and work redesign in the district.

Introduction

Human resource development is a critical factor in the implementation of health and social development. The South African Government proposed that education and training programmes should be aimed at recruiting and developing personnel who are competent to respond appropriately to the health needs of the people they serve.

According to the Human Resources for Health document, one option to ensure adequate staffing in rural services is to expand the skills of existing technical workers with enhanced competencies. They go further to suggest that a multipurpose unskilled or semi-skilled worker could mean combining driver, cleaner, ground - care (Department of Health, 2000: 78). It is therefore important to explore the work of everybody in such settings, and not just the nurses.

Literature survey

According to Buchman, Ball and O'May (2000) the level and mix of staff deployed is a central element in determining the cost of care and quality of care. These authors describe skill mix as the mix of employees in a post, mix of

post in the establishment, combination of skills available at a specific time or combination of activities that comprise each role. Skill mix review requires a broader vision of resource planning and need to be linked to other initiatives and organizational development.

These authors identify approaches to skill mix as follows:

- Task analysis
- Activity analysis / activity sampling
- Daily diary / self-recording
- Case mix / patient dependency
- Re-profiling / re-engineering
- Job analysis interviews / role-review
- Group discussion / brainstorming session

Each approach has its strengths and limitations.

Work redesign (also called job restructuring job enrichment or restructuring care systems) is an effort to reduce cost, increase operational flexibility, improve quality, strengthen organizational integration, and improve efficiency by macro-level or micro-level restructuring (Kelly and Maas, 1995: 7). The first step in the redesign process is assessment of existing roles in order to accurately diagnose the need for redesign. The second step is to formulate

Table 3.1 Health workers interviewed according to age and sex.

Category	Sex		Age					Total
	M	F	20-29	30-39	40-49	50-59	60-65	
PHC Settings								
GA	-	6	-	3	-	3	-	6
Clerk	-	3	1	-	2	-	-	3
Security	3	1	1	-	-	2	1	4
Ground's man	3	-	-	-	3	-	-	3
Hospital Settings								
GA	2	21	1	8	6	7	1	23
Security	3	-	-	2	-	1	-	3
Porter	3	7	1	3	4	1	1	10
	14	38	4	16	15	14	3	52

goals for the planned change.

A case study by Redman and Ketefian (in Kelly and Maas, 1995: 17) lists the following strategies used in a job redesign project in the USA:

Eliminate non-nursing tasks:

- Reallocate job responsibilities
- Delegate
- Change assignment patterns
- Revise scheduling of non RNs

Utilize alternate care providers:

- Identify appropriate worker for task
- Use appropriate worker for task

Improve systems:

- Reallocate job responsibilities
- Revise model of care delivery
- Eliminate redundancy
- Revise work methods
- Eliminate tasks

Utilize technology:

- Use communication media
- Use assessment media
- Use care assistance apparatus

Such redesign project can enhance job satisfaction, improve efficiency and improve quality of care. However, they can also be threatening, time consuming and lead to resistance and turmoil. Brown (in Kelly and Maas 1995: 221) identified the following requirements for successful job redesign: a diverse group, time, research, participation, diagnostic data, a systems perspective, shared values, and education. She points out that systems often becomes more rigid when threatened by change, and this lead to a breakdown of change.

Aim and objectives

The aim of this study was to do a job analysis of all categories of nurses working in a district health system, as well as of selected other health workers in the same health district. The job analysis with regard to nurses working in hospitals was described in part one of this series of articles, and that of primary health care (PHC) nurses in part two. In this article the job analysis of non-professional health workers in clinics and hospitals will be dealt with, and also the recommendations based all three parts.

The specific objectives addressed in this article are to:

1. Describe the current jobs, training and work distribution of Security Staff, General Assistants (GA), Clerks, Ground's Men and Porter
2. Identify skills and knowledge gaps in current practice of these workers in relation to job expectations or future deployment.
3. Make recommendations about skills mix in district services.

Methodology

The work of the non-professional clinic staff was surveyed using individual interviews.

Sample: Two fixed clinics and one health centre was randomly chosen and all workers in the five categories listed in objective one were interviewed. In hospital settings a convenient sample of workers at five different types of units per hospital was included in the sample. Again, all workers on duty on the day of the visit were interviewed.

Interviews were done with 53 health workers of these categories. Only one of them was a Health Educator, and since this is too small a sample, this category was not explored. The sample description is summarized in table 3.1.

Table 3.2 Tasks of security staff and frequency mentioned in different settings

Frequency	Tasks in PHC setting	Nr of response	Tasks in Hospital setting	Nr.
Every day	1. Open and close gate for vehicles Make driver sign in Gate Control Sheet.	4*	1. Control gate access	1*
	2. Check patients in waiting room	1*	4. Clean around gate	1
	3. Take rounds of premises	3*	8. Raise the flag	1
	4. Clean around main gate	1	9. Switch off the lights on the grounds and in building	1
	5. Keep weapons of visitors at the gate	1	10. Help nursing staff to restrain violent patients	1
	6. Help those who are disabled	1		
	7. Watch those who come in under the influence	1		
Once a week or once a month	1. Cleaning of windows	1		
	2. Take out refuse	1		
	3. Unload deliveries, e.g. medicine	1		
	4. Inspect cars leaving and staff's bags	1		
Only once or rarely	1. Helped with planting of trees	1	5. Escort cashier to the bank	1
	2. Replace a globe	1		
	3. Fix leaking tap	1		
	4. Help lift oxygen cylinders	1		

* Starred items are performed more than once a day.

Sampled PHC settings and hospitals were approached by mail to explain the research and ask for their participation. A reply sheet was provided. On receipt of a positive answer, arrangements for the interview visit were made with the person in charge of the service, who arranged with individual units. Individual workers were approached and asked to participate. Interviews took place during on-duty time in a place the respondent chose.

Data collection instrument: An interview schedule was used since these workers may not have been able to complete their own task lists. It consists of mainly open-ended questions and was used to provide data similar to that obtained from nurses through the questionnaire. It dealt with their tasks, the training they had for this job, their busiest and least busy times during an ordinary week, and their suggestions for improvement of the service delivered in their setting.

Results

The tasks, training, and busiest and least busy times and suggestions for improvement in the unit will be discussed separately for each category.

It would seem that the most busy time for all categories of workers at the PHC settings were the mornings during the week, and the least busy times were the afternoons during the week, and weekends (if the service functioned over weekends). In hospital settings it differed for different categories, and will be discussed with each category.

Security staff (n = 7)

From table 3.2 it would seem that PHC guards have a more varied role than the hospital guards. Both have direct patient contact, but it is limited. The most common training of security staff was shooting (n = 4), but two in the Hospital settings also had security updating, and one in the PHC setting had a course on communication and working conditions. Hospital security respondents described the same pattern as the PHC respondents, with the mornings being the busiest, and afternoons and weekends less busy.

Suggestions for improvement of the functioning of the clinic or hospital from this group dealt mainly with making their own work easier or more effective: creating a small gate for pedestrians to enter (hospital and clinic), a shelter at the main gate so that they are protected (hospital), fit a boom gate (PHC), return their guns which was taken away without explanation, especially for nights, provide a heater, stove and fridge, as well as search machines (all this from one person at a PHC settings), monthly meetings (PHC), and a remote control to open the gate on rainy days.

Two comments, however, dealt with the functioning of the service in general. One person suggested extending the clinic, and another suggested building a pit toilet, since the inside toilets broke down all the time and took long to repair. This respondent also suggested that the clinic operate daily, and that more chairs be provided for patients to sit on while waiting.

General assistant (n = 29)

While the role of the General Assistants in PHC are almost exclusively cleaning, the GAs in hospital settings add the food and drink management and the running of errands as two major roles. They are also involved in restraining pa-

tients, while the direct contact of PHC GA's with patients have to do with community campaigns (Table 3.3).

GA's in Hospital settings seem to be most busy on a Monday (n = 7) and Wednesday (4), although all other days except Sunday is also mentioned. They are the least busy on weekends (n = 10) and perhaps on Fridays (n = 4). Their

Table 3.3 Tasks of General Assistants and frequency mentioned in different settings

Frequency	Tasks in PHC setting	Nr of response	Tasks in Hospital setting	Nr.
Every day	1. Damp dust	4	1. Damp dusting	17
	2. Clean toilets	3	3. Collect, wash, hang and/or iron linen	6
	3. Wash dirty linen and iron	4	5. Clean floors	9*
	4. Clean urine collecting bottles	2	10. Empty refuse bins	19*
	5. Clean floors	2*	12. Clean sluice room and bed-pans	10*
	6. Clean and tidy benches	1	13. Collect and fill bedside water containers.	6
	7. Clean yard	2	14. Serve meals.	9*
	8. Clean outside toilets	2	15. Wash dishes	8*
	9. Wash curtains in labour ward	1	16. Dust windows, doors, IV stands, chairs	2
	10. Empty refuse bins	2*	17. Make and serve tea or juice	13
	11. Burn refuse	1	18. Sort linen and put in bags	7*
	12. Clean sluice room	1*	19. Prepare/fetch/return food trolley	8*
Once a week or once a month	1. Wash windows and curtains	4	20. Clean basins and bathrooms	4
	2. Clean inside walls	3	21. Sort and count linen	2
	3. Polish floor	2	22. Run errands	16*
	4. Clean stools and benches	1	23. Clean kitchen	4
	5. Pack and count linen	1	24. Help with packing of instruments	2
	6. Clean medicine cupboard, stove and fridge	1	25. Taking patients/corpse somewhere	10*
Only once or rarely			26. Take refuse bags to the incinerator	1*
	1. Attend HIV/AIDS awareness day	2	1. Clean windows and curtains	10
	2. Helped during immunization campaign	2	2. Wash walls (daily in theatre)	4
	3. Opened suction machine	1	6. Clean fridge and stove	5
			7. Clean bedside tables, bed stands, wheels, trolleys, machines	10
			8. Wash refuse bins (and boots in theatre)	4
			9. Changing curtains	1
			10. Pack or tidy linen room	6
			11. Clean instruments	4
			4. Taking things somewhere	2
		5. Help with bed-making	1	
		6. Help restrain violent patient	2	
		7. Assist nurses with procedure	2	
		8. Clean lamp shades	1	
		9. Clean yard around theatre	1	
		10. Do small things for patients	3	

Table 3.4 Tasks of clerks and frequency mentioned in different settings

Frequency	Tasks in PHC setting	Nr of response
Every day	1. Enter patients in register	3*
	2. Control telephone and record all calls	3*
	3. Sort those patients who need urgent attention and report	1*
	4. Issuing medication for each consulting room	1
	5. Give out files to patients with chronic conditions	2*
	6. Assist with weighing	1
	7. Put away chronic files	1*
	8. Prepare specimens for transport to hospital	1
Once a week or once a month	1. Collect money for private calls	1
	2. Claim night duty allowance for the staff	1
	3. Balancing stock in dispensary	1
	4. Check expired medication and return	1
	5. Enter all medication in the stock card when received.	1
	6. Order medication with assistance of RN	1
Only once or rarely	1. Do statistics of medication with assistance of RN	1

most busy time of the day are early, from when they get on duty until 09h00, and their least busy period is late morning around 10h00 to 12h00 (n = 7) or in the afternoon 14h00 (n = 7), 15h00 (n = 2), or 16h00 (n = 3).

None of the GA's in PHC had any training, while in Hospitals 6 has Fire drill training, 6 had Batho Pele training, 1 had a cleaning course and 1 had a first aid course.

With regard to suggested improvements, the suggestions from GA's in different settings differed in character. Only two of the 23 GA's in Hospitals made positive suggestions (keep communicating to keep people informed, and let them start working at 06h00, so that the ward is clean when the nurses start). Most of them wanted more staff (n = 7), that some of their jobs be taken away (dishing up and running errands). Especially the errands seem to be a problem for them "We are not messengers. It makes us not complete other tasks," said one.

The suggestions from GA's in the PHC setting dealt with asking for washing machines (n = 3), cleaning equipment, stronger gloves, and a machine for cleaning floor tiles. One suggested that there should be more nurses on night duty, because "there are only sisters, and nobody to do the nursing work"!

Clerk (n = 3)

The main role of this category seems to be that of receptionist, but in each setting a few other duties were added (see table 3.4). In one setting this involved the clerk with medication to a substantial degree. One clerk had Batho Pele training. Clerks suggested that they be provided with PCs, additional filing cabinets and training about medication to make things better.

Ground's man (n = 3)

Gardening and cleaning seems to be the main roles of this category, but again, other tasks were added in most cases (see table 3.5). One ground's man had Batho Pele training. One ground's man asked for a lawn mower (probably the one who cuts the grass every single day!), and another suggested security training.

Porters (n = 10)

The porters' main role is that of transporting patients within the hospital, and running errands (see table 3.6). Much of the errands have to do with specimens and supplies. One porter had a first aid course. For improving the situation, porter suggested that nurses should help push the trolleys, someone else should check oxygen in the wards, and males should do heavy lifting. One also suggested that doctors come to work earlier, so that admissions can take place earlier.

Discussion

The security staff and General Assistants seem to have the task of dealing with violent people (under the influence of substances or not), without any training for such a task. This would seem like a priority in terms of in-service education.

General assistants in hospitals do many tasks related to food and drink management, and share this with the ENA's according to observations. None of them has had any training. This needs to be rectified, since the clean handling of food and drink cannot be assumed with this group.

Since this group of workers also deal with linen, teaching them about the cleaning and care of linen might contribute to the good care of linen.

GA's in PHC clinics do mainly cleaning, but get involved in community projects. It might be possible to enlarge this role by judicial teaching

GA's and porters do much of the running of errands, and complain that this interferes with the performance of scheduled tasks. It might be better to appoint specific GA's as messengers, give them specific routes, and times when units can expect them. Scheduling this activity might make it less frustrating for all concerned.

Table 3.5 Tasks of ground's men and frequency mentioned in different settings

Frequency	Tasks in PHC setting	Nr of response
Every day	1. Cut grass	1
	2. Clean and tidy premises	3
	3. Operate incinerator	1
	4. Empty refuse bins in nurses' home	1
	5. Collect wood to make fire in incinerator	1
	6. Plan vegetable garden	2
	7. Water garden	1
	8. Weed garden	1
Once a week or once a month	1. Wash cars	1
	2. Help unloading deliveries	2
	3. Cut grass	2
	4. Relieve security guards	1
Only once or rarely	1. Plant trees	1

Grounds men seem to have a gardening function, which can be enlarged through training. They can then be involved in community projects such as starting community gardens, or in supplying additional food for needy patients with chronic conditions.

Porters seem to have very little preparation for their work, and first aid and resuscitation training seems to be indicated. They do not indicate that they assist with restraining of patients, but if they were trained with security staff to deal with this task, this would be useful.

Recommendations

Recommendations with regard to other health workers:

It is recommended that the District embark on a process of work redesign and continuing education to enhance system efficiency, decrease the threat of staff burnout, and improve quality of care by giving attention to the following:

It is recommended that detailed job descriptions be developed for the support staff, and that these be used to prepare regular in-service education. Security staff, porters and GA's: Dealing with violence in a non-violent way.

GA's in hospitals: Working with food, and working with linen.

Porters: First Aid and resuscitation.

Groundsmen: Making food gardens.

Recommendations with regard to skills mix:

In PHC settings, it would seem that the RN, EN

combination is adequate, without adding ENA's. GA's in this setting can be trained to be more involved in community projects, and groundsmen could be trained to assist with food gardens in the community.

In Hospital settings the launching of a messenger service with regular rounds should be seriously investigated. The combination of three categories of nurses seems to be working well, but it might be possible to increase the ENs and decrease the RNs in the light of the overlap in functions. All other categories are also functioning within well-delineated roles.

If the District decides to do some work redesign projects, this should be evaluated through research.

Conclusion

Jobs descriptions and job establishments develop over long periods of time due to local, regional and national factors, as well as time-limited and enduring factors. Often the jobs and establishments no longer serve the system optimally. Comprehensive reviews might not be done since there are always more pressing problems and priorities, and people resist "fixing what ain't broke". Nevertheless, much can be gained by having a close look at the skills mix in health services, the real jobs people perform, and their developmental needs.

Table 3.6 Tasks of porters and frequency mentioned in different settings

Frequency	Tasks in PHC setting	Nr of response
Every day	1. Clean trolleys and put on clean linen, clean wheelchairs	4*
	2. Take patients to different departments	9*
	3. Run errands (reports, specimens, forms)	9*
	4. Help patients on and off trolleys and wheelchairs	2*
	5. Take corpse to mortuary (Less often)	4
	6. Check oxygen cylinders	3
	7. Collect wheelchairs and trolleys from wards	2
	8. Direct patients	1*
	9. Collect and deliver dispensary trunks	3
	10. Accompany patients to other hospitals	1
	11. Interpret for doctor	1
	12. Help in the dental clinic	1
	12. Tidy and clean stock room	1

References

BUCHAN, J; BALL, J AND O'MAY, F 2000: Skill mix in the health workforce. Issues in health service delivery, discussion paper No 3. Geneva: World Health Organization.

BURGEL, BJ; WALLACE, EM; KEMERER, SD & GARBIN, M 1997: Certified Occupational Health Nursing job analysis in the United States. AAOHN Journal 45(11): 581-591.

DEPARTMENT OF HEALTH 2000: Human resources for health. Pretoria: Department of Health

KELLY, K AND MAAS, M 1995: Health care work redesign. Thousand Oak: Sage Publications.

