SCALING UP NURSE EDUCATION: AN EVALUATION OF A NATIONAL PhD CAPACITY DEVELOPMENT PROGRAMME IN SOUTH AFRICA

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INTRODUCTION

- The global shortage of nurses educated at baccalaureate level and higher is of serious concern to the future of nursing and academia in particular. Less than 1% of nurses have a doctoral degree (Feeg & Nickitas, 2011).
- To address these shortfalls many countries have set higher degree targets and developed advanced nursing roles, which have to found to impact positively on health care (Kennedy et al., 2012; Comiskey et al., 2014).
- In South Africa (SA) less than 20% of RNs have an undergraduate degree and far fewer PhDs than the global average. A PhD proposal development programme was initiated nationally in SA to address the current and anticipated deficits in nursing research and scholarship.

STUDY AIM AND OBJECTIVES

The aim of the study was to evaluate the PhD proposal development programme and to determine whether it was "fit for purpose".

The objectives were to:
- ascertain how the programme (curriculum, content, and process) was experienced by candidates, facilitators and assessors.
- explore the extent to which the programme contributed to both the funders and the proposed national nurse education and health insurance policies SA.

DESIGN AND METHODS

- As **study design** we chose a comparative effectiveness research (CER) design (Tunis, Benner & McClellan, 2010) in favour of a concurrent mixed methods approach.
- **Participants** were purposively selected comprising PhD candidates (n-49) and programme facilitators, supervisors, assessors and key stakeholders (n=10).
- **Data collection** methods included a 1-day consultative workshop and evaluation reports (for an early and a later module) from three PhD cohorts,.
- For **data analysis** we used inductive thematic analysis and descriptive statistics (Mann Whitney *U* test) for data from the consultative workshop and evaluation reports respectively. Scores on the evaluation forms ranged from 1 denoting 'poor' to 5 denoting 'excellent'.
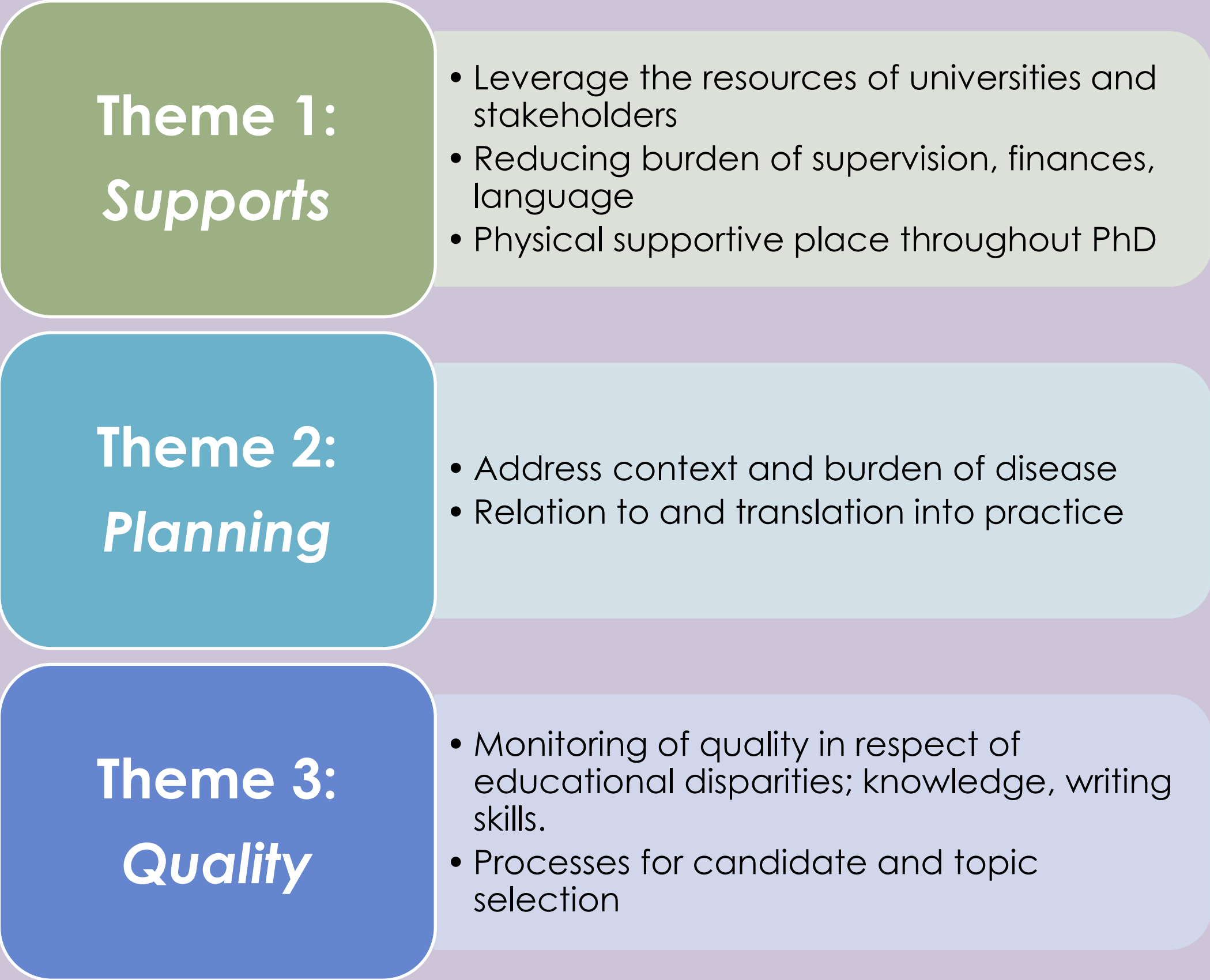
RESULTS

- There were no results for the third (Durban) cohort as they had not yet completed the later module; none of the module items received a rating of 1.
- The vast majority of candidates rated the academic content of the modules highly; the lowest mean score in one cohort was found in "learning from your group" (Tables 1 and 2). The highest overall mean score was found in candidates' satisfaction with the programme meeting their expectations; the difference between cohorts was not significant.
- The Mann Whitney test showed a significant difference (p= 0.009) between the cohorts' ratings of the module enabling them to identify suitable research approaches.
- Three themes (Supports, Planning and Quality) and seven subthemes emerged from the analysis of the qualitative stakeholder data. (Figure 1).

Table 1 Candidates' assessment of academic content of an early module	Cape Town ratings					Johannesburg ratings					Durban ratings					Overall	
	Mean	n	2	3	4	5	Mean	n	2	3	4	5	Mean	n	2	3	4	5	Mean	n
Relevance of your current research stage	4.36	14	0	2	5	7	4.59	22	1	3	0	18	4.00	5	0	0	5	0	4.32	41
Extent to which you acquired new information	4.14	14	0	4	4	6	4.36	22	2	2	4	14	--	-	-	-	-	-	4.25	36
Extent to which modules aided you to review your PhD with broader perspective.	4.64	14	0	0	5	9	4.64	22	1	1	3	17	4.54	13	0	1	4	8	4.61	49
Extent to which modules aided you to identify suitable approaches to your research.	4.07	14	0	3	7	4	4.62	21	1	1	3	16	4.42	12	0	1	5	6	4.37	47
Increase in your knowledge of the research process	4.36	14	0	2	5	7	4.67	21	0	2	3	16	--	-	-	-	-	-	4.51	35
Learning from your group	3.86	14	1	4	5	4	4.14	22	0	7	5	10	4.33	12	0	2	4	6	4.11	48
Extent to which you are satisfied with modules meeting your expectations of this programme	4.57	14	0	0	6	8	4.81	21	0	1	2	18	4.62	13	0	0	5	8	4.67	48

Table 2 Candidates' assessment of academic content of a later module	Cape Town ratings					Johannesburg ratings					Durban ratings					Overall	
	Mean	n	2	3	4	5	Mean	n	2	3	4	5	Mean	n	2	3	4	5	Mean	n
Relevance of your current research stage	4.78	9	0	0	2	7	4.40	15	1	2	2	10							4.59	24
Extent to which you acquired new information	4.44	9	0	0	5	4	4.94	16	0	0	1	15							4.69	25
Extent to which modules aided you to review your PhD with broader perspective.	4.56	9	0	0	4	5	4.87	15	0	0	2	13							4.71	24
Extent to which modules aided you to identify suitable approaches to your research.	4.56	9	0	0	4	5	4.71	14	0	0	4	10							4.63	23
Increase in your knowledge of the research process	4.56	9	0	0	4	5	4.67	15	0	1	3	11							4.61	24
Learning from your group	3.56	9	0	4	5	0	4.13	15	2	2	3	8							3.84	24
Extent to which you are satisfied with modules meeting your expectations of this programme	4.78	9	0	0	2	7	4.80	15	0	0	3	12							4.79	24

Figure 1 Themes and sub-themes from qualitative stakeholder data

Theme 1: Supports
- Leverage the resources of universities and stakeholders
- Reducing burden of supervision, finances, language
- Physical supportive place throughout PhD

Theme 2: Planning
- Address context and burden of disease
- Relation to and translation into practice

Theme 3: Quality
- Monitoring of quality in respect of educational disparities; knowledge, writing skills.
- Processes for candidate and topic selection

CONCLUSIONS AND RECOMMENDATIONS

- The candidates' experience of the programme was positive and deemed it fit for purpose.
- Overall the results show the need for a deepened response on a systems level and stakeholder relations level; increased support, improved planning and increased monitoring is needed to ensure quality.
- To address sustainability and capacity in scaling up nurse education, we recommend that top-up/conversion degrees for diploma level RNs be developed alongside a national strategy for doctoral and post doctoral training.

ACKNOWLEDGEMENT

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