

The Quality Nursing Educational Innovation and Enhancement of the Decentralized Practical Model for Health Education and Training in Rural Zambia

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Abstract

St. Luke's School of Nursing and Midwifery is located at a rural Mission Settlement in Mpanshya, Zambia. It opened in 2009, with just 30 students, but was recognized for its success and innovation and upgraded, now serving 210 students. 400 have successfully graduated and work across the country.

To accommodate the increased intake and meet quality training standards the School pioneered a decentralized practical training model, the first of its kind in Zambia.

Zambia, like many other low income countries, faces considerable challenges in providing sufficient human resources for health. It has a shortfall of 9'000 nurses (60% of its requirement). Rural hospitals suffer particularly drastic gaps between planned and actual staffing numbers, with difficulties retaining them. Zambia failed to meet MDG5 (UNDP, 2013) and still only 47% of births are attended to by skilled personnel, contributing to maternal mortality of 440 deaths in 100,000 live births. International health strategies (WHO 2008, 2010) and Zambia's national health priorities (MoH, 2011, 2012, 2013) emphasizes training institutions need to increase their output.

Keywords: *Pioneering, Decentralized practicum sites, quality, practical-training, rural, Zambia*

Introduction

In rural clinics Zambian nurses are likely to be the sole health professionals. Without having experienced the reality and challenges of rural practice the outlook for staff performance and retention is poor (WHO, 2010). Equipping professionals for these demands is only possible by training them in the rural context. The decentralized model enables this need to be met.

Aim of innovation

To design and implement a model which will help train higher numbers of quality nurses and midwives in rural settings for carers in rural communities.

Innovation 1) When the student intake was increased the hospital attached to the School had insufficient capacity to offer a quality learning environment with adequate supervision. To enable greater numbers of students to be trained a fresh concept of decentralized sites was designed and implemented by the School. This is novel to Zambia as typically students are only attached to the hospital next to the school.

The school engaged two rural hospitals to provide decentralized training. Students rotate through each site benefiting from three different learning environments. A fourth-site expansion has since been completed and ready to house the students.

Innovation 2) Clinical Instructors in Zambia are typically full-time and attached to a school, posing problems with supervising a large pool of students. To address the unacceptably high ratio of students to CIs the School engaged a decentralised team of nurses and midwives. They take on the supplementary role of Clinical Instructor, supervising and assessing the students in addition to their existing responsibilities. On the job training is provided by the School, meaning concurrent capacity building of staff.

Methods used to assess the innovation

- Comparison of examination results pre and post implementation of decentralized training at the school.
- Monitoring levels of rural/urban graduate postings at the posting centre in the Ministry of Health.
- Ongoing monitoring and evaluation by School tutors at all three (3) sites.
- Regular assessment by stakeholders at the national level.
- Needs analysis

Method

A needs analysis tool, Rosset (1987) was used to structure the process of gathering evidence, analyzing evidence and reporting back findings. This tool has been previously implemented in clinical needs assessments and involves a systematic four step process to conducting the needs assessment; stating the current way processes are taking place, conducting the need assessment, analyzing results to identify thematic areas and then proposing recommendations for a new way. This will be used as the basis of reporting what was found in this needs assessment.



There are currently three (3) practical training sites. One mother site and two decentralized training sites at other rural hospitals. Two sites are mission run and one is government funded. Agreements are currently being made with a third government run institution to create a new site.

At the time this needs assessment was conducted there were a minimum of two clinical Instructor (CI) at each site (supported by the SolidarMed project) and two based at the School (fulltime, government funded positions) with 8 in total. This makes a ratio of approximately 1:20 (CI: students) which is not in keeping with the General Nursing Council of Zambia who recommend 1:10 as a best practice standard.

Each site has a student cupboard of equipment to use for practicing procedures and for practical exams. This supplements the hospital equipment which is not always adequate. Consumables are supplied to each site for use by students on a yearly basis. This is currently funded by SolidarMed.

Supervision is done on an ad hoc basis, mainly by the Principal Tutor.

There are currently three different streams of nurse training running simultaneously. This makes it difficult to follow the course master plans.

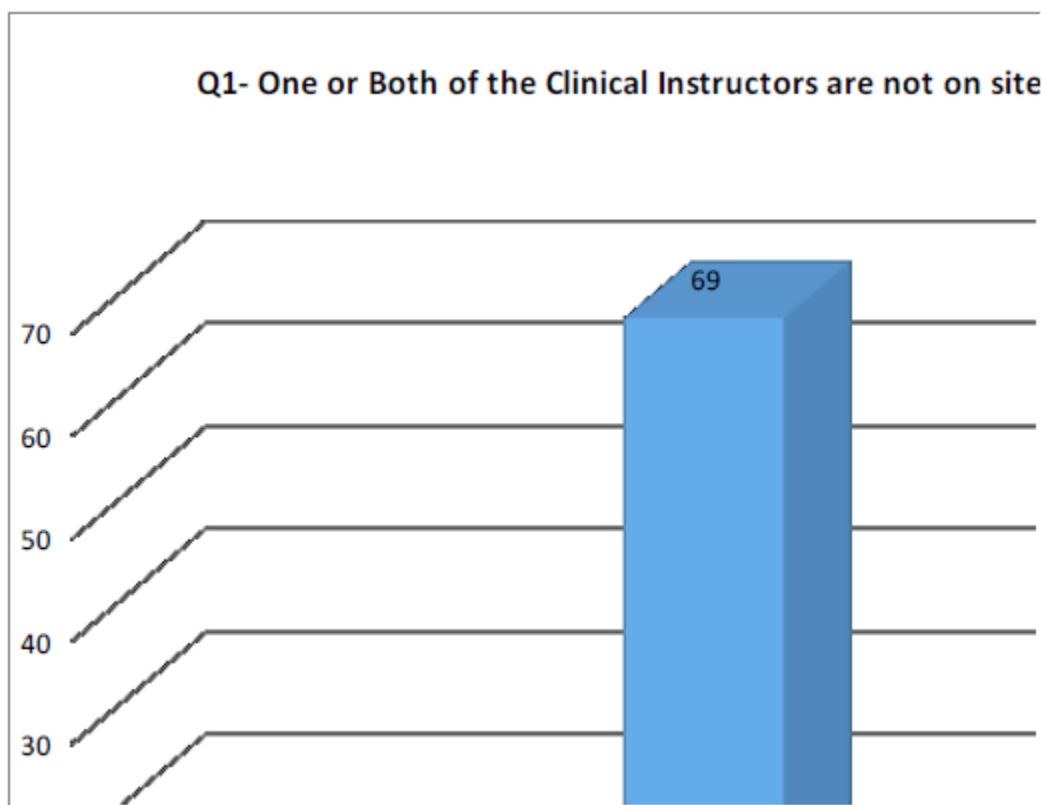


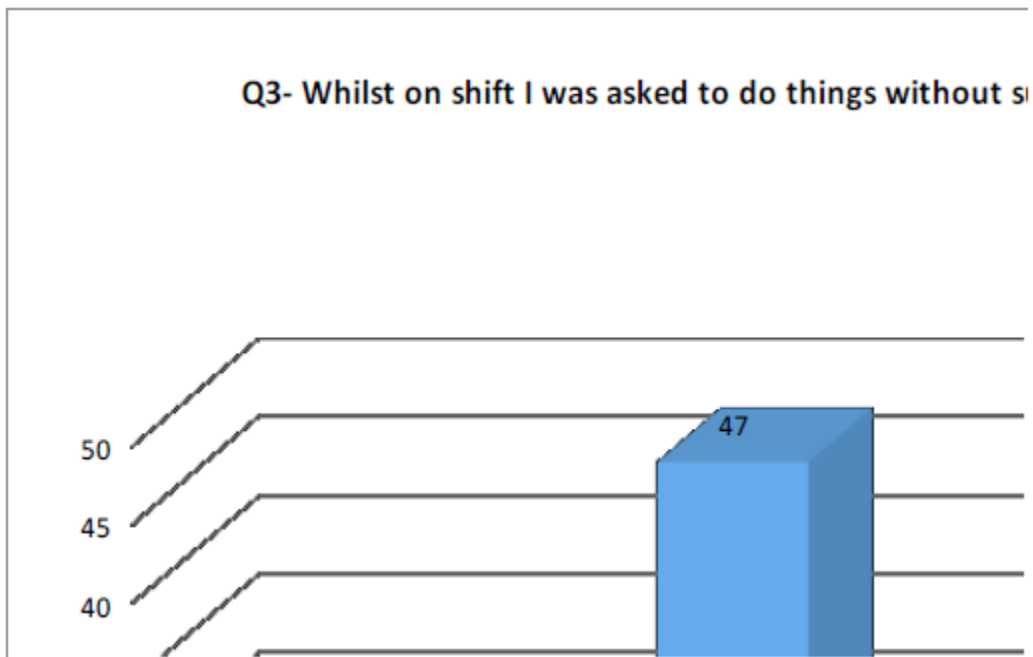
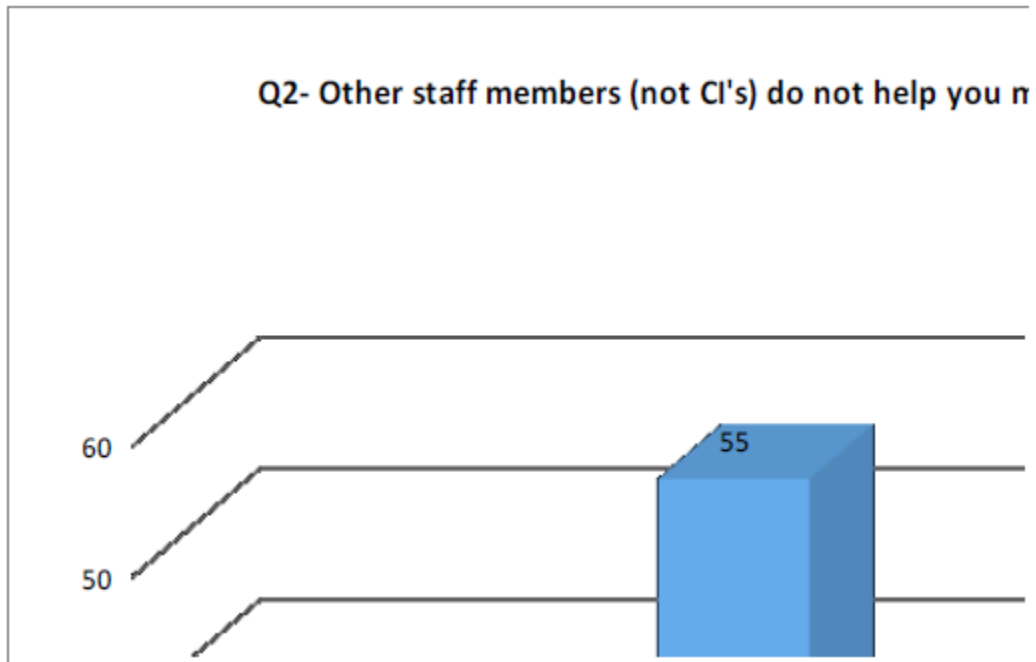
Methodology

A variety of methodologies were used to complete the needs assessment with all major stakeholders. Methodologies chosen were thought to provide the best way to engage the specific stakeholder group and gather the most reliable information. The CI's and Hospital Management Team's were interviewed using open ended questions to guide the discussion and ensure some uniformity between sites and a SWOT analysis to record the answers and satisfaction levels. A questionnaire was given to students to collect quantitative data and allow anonymous evaluation, followed by a reflective session to gain more qualitative information and to detect themes emerging. Inventories were taken of equipment at all sites, plus observations of equipment usage and the contents of student cupboards during practice and practical exams were performed.

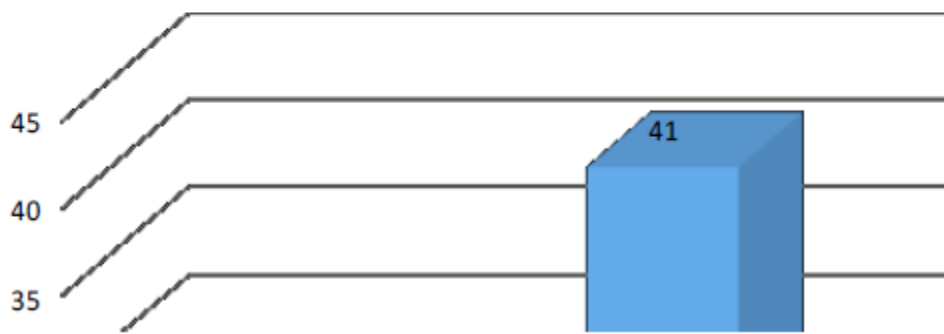
Results

The quantitative results were formulated into the graphs below;

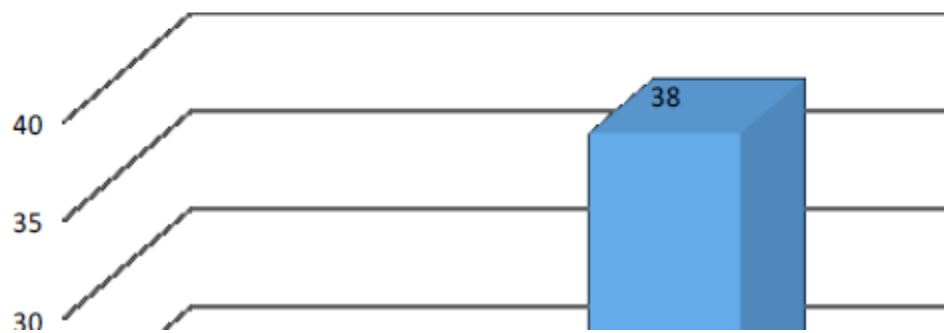




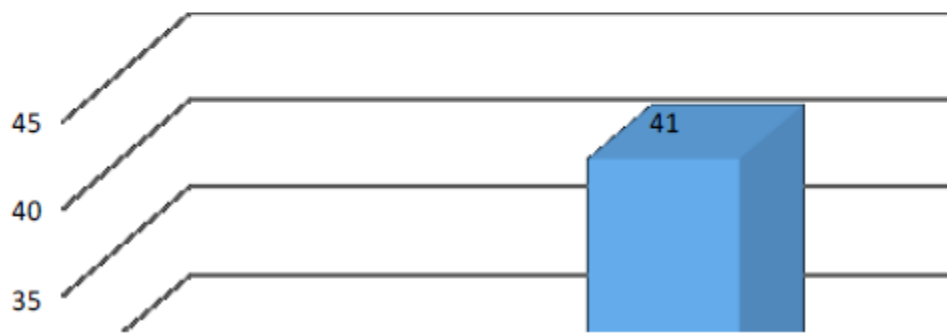
Q4- It's difficult to fully meet learning objectives by tl



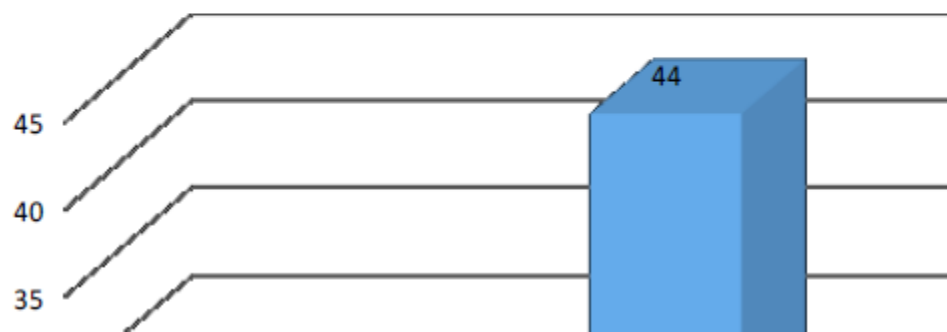
Q5- Each practical training site expects you to do tl



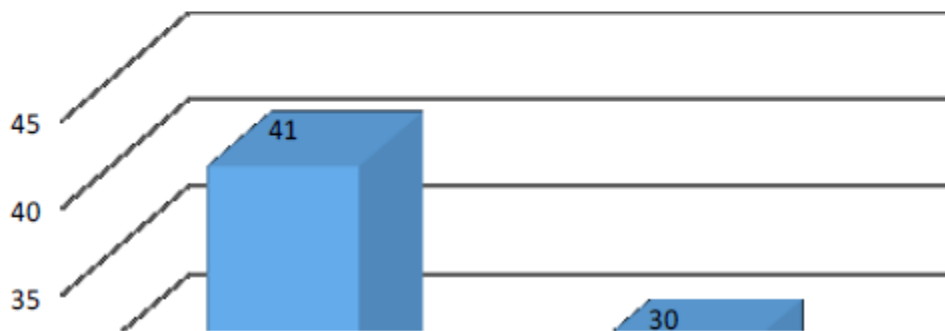
Q6- You are re-taught to do things differently in the cl



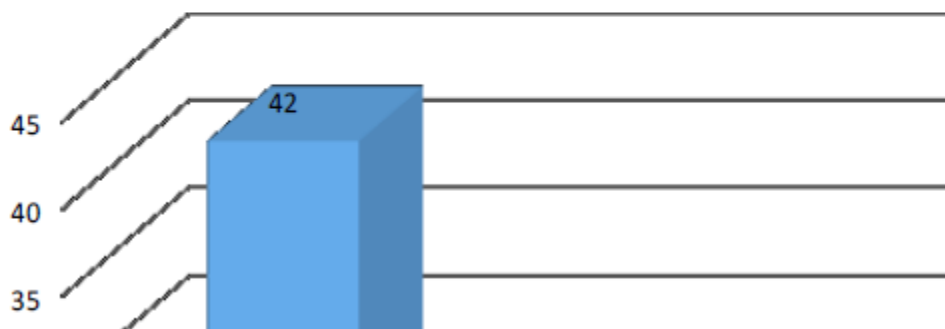
Q7- You have not been taught things in class that you n

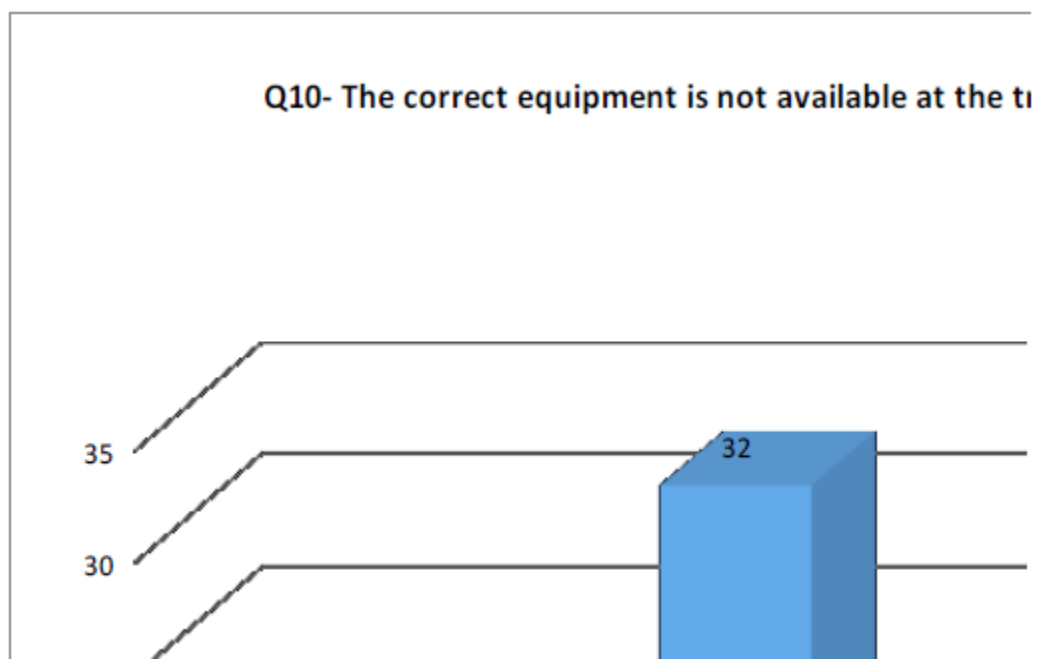


Q8- You are not given a chance to give feedback after p



Q9- It is difficult to contact the school if you have p





STRENGTHS	WEAKNESSES
<ul style="list-style-type: none"> • <i>Staff house opposite to students works well</i> • <i>Lots of learning opportunities at the hospital</i> • <i>The hospital benefits from the students as a human resource</i> 	<ul style="list-style-type: none"> • <i>Infrastructure means that there is no real defined area for students to study, eat and socialise together</i> • <i>Maintenance structure is poor. No one person responsible- no fee for workmanship</i> • <i>Bad communication from school</i> • <i>No regular meetings with School to discuss terms and conditions.</i> • <i>School have delays with answers to letters</i> • <i>Delay from school with payments owed</i> • <i>Objectives sometimes too broad and difficult to meet.</i> • <i>NO MOU between St. Luke's hospital and the school</i> • <i>Has not always been adequate management/supervision of CI from the school</i>

OPPORTUNITIES	THREATS
<ul style="list-style-type: none"> • <i>Would be good to meet up with other HMT to share ideas and learning</i> • <i>Would be good to tell general nursing staff more about what is happening in the teaching at the school</i> • <i>Training, capacity building for nurses on clinical issues as well as mentoring could help change attitudes and mean more assessors on the ground.</i> 	<ul style="list-style-type: none"> • <i>CI allocated not interviewed as the lack of nurses means there is not always that many options for RN.</i> • <i>When CI are on leave it is difficult to find people to take responsibility for students.</i> • <i>If students are given evaluation manuals etc late this compromises practical training.</i> • <i>MOU's with all three sites differ, eg hosting fees</i> • <i>Late delivery of equipment needed for students ie gloves can mean the HMT need to step in,</i>

	<ul style="list-style-type: none"> • <i>Nurse's attitude is often poor towards students? Due to fear of teaching or lack of own knowledge</i>
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Overall analysis of student feedback

Overall analysis of this section shows that the students have had a varied clinical experience in their first year of training with both positive and negative outcomes. When results of both the questionnaire and open reflective session are analyzed together there is indication of a need for more supervision and equipment to ensure a higher quality of practical training. These issues will be looked at in more detail later in the needs analysis, with comparison of the views of other stakeholders.

Hospital management teams (HMT)

Representatives from HMT at all sites were interviewed. In some sites this included both the Medical Officer in charge and the Nursing Officer but on one site only the Senior Nursing Officer was available to complete the needs assessment. Barriers included people being on leave and the handover of responsibility at one hospital to a new acting medical officer during the process meaning historical information was only hearsay and so it was not deemed appropriate to involve this in the assessment.

Open ended questions were asked but some structure was used for the areas asked about. Answers from each site were firstly recorded on separate SWOT tools however for analysis they have all been combined into one tool below, with the inference that if something is identified as a threat at one site it could also be a potential threat at all sites.

HMT Overall analysis

Overall analysis of feedback from interviews with the HMTs shows a need for more administrative structures to be put in place (such as maintenance procedures and how to effectively communicate) in order to strengthen the partnership. Emerging themes included a need for more communication with the

STRENGTHS	WEAKNESSES
<ul style="list-style-type: none"> • <i>Good team of CI with differing experiences.</i> • <i>Many have done EN- RN therefore understand both cadre courses.</i> • <i>Done at different institutes</i> • <i>Have 2 x full time CI</i> • <i>Some current CI have done 2 week GNC assessor course</i> • <i>Have In charges on each ward so can gain their help to supervise students</i> • <i>Some CI are I/C and the shift pattern makes it easier to supervise students.</i> • <i>Do a good orientation and set objectives as well as meet with each student individually*** NOT a model used everywhere.</i> • <i>GNC assessor course was very useful</i> • <i>Works better if CI is on 8-16.00 shifts</i> • <i>Some CI already OSCE trained.</i> 	<ul style="list-style-type: none"> • <i>Don't feel like valued member of the school team</i> • <i>Nurses rotate around wards meaning there is no permanent in-charge. This makes continuity difficult for students and poses problems with the end of placement progress tool</i> • <i>Very rarely get to meet with other CI from other sites meaning they can't share ideas or discuss concerns about students.</i> • <i>Food transportation is not done regularly and not worked out per student. Would be better to have monthly distributions.</i> • <i>Money (top up) is not given regularly and is not enough for the current workload. 1 CI: 15 students.</i> • <i>Demands on time such as workshops, extra programmes takes</i>

	<p><i>them away from the students.</i></p> <ul style="list-style-type: none"> • <i>Anti-social shifts means difficult to see students</i> • <i>Don't think HMT are aware of the extra pressures on CI as well as normal job</i> • <i>Lack of support for the CI from the School.</i> • <i>Some equipment falling apart- not good quality.</i> • <i>Attitude of other nurses is that CI should do everything for students and that they should not be involved</i>
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OPPORTUNITIES	THREATS
<ul style="list-style-type: none"> • <i>New CPD points mean that nurses are more eager to help out with students and teaching- however they might need formal assessors training.</i> • <i>Use In-charges for exams and supervision- they might benefit from more training.</i> • <i>Could be more academia set whilst they are on placement- currently they do not have assignments whilst they are in practice.</i> • <i>More equipment would be helpful for students and the hospital</i> • <i>Nurses should be taught more about the school and the students course</i> • <i>Need to strengthen the teams so they split work better.</i> • <i>An extra CI would be very useful</i> • <i>If tutors were more involved they could help bridge the theory/practical gap</i> • <i>Need HMT to help out with nurse attitudes to students and CI</i> • <i>Nurses meetings could be used to</i> 	

School, more support for students on the ground in terms of building up nurses as better mentors and supporting CI's or bringing more CI into the team. Equipment was deemed to be adequate but systems of deciding and prioritizing what is needed, how much and how to deliver it on time are needed. An evaluation tool for use by the HMT could help strengthen communication and help quality assurance from both stakeholders; the School and the HMTs.

The resigning of MOU's could provide the forum for sharing good practice and harmonizing agreements between all sites and the School.

Clinical instructors:

In total 6 out of the 8 Clinical instructors were interviewed during the needs assessment, two from each decentralized practical training site. At the mother site one of the CI was supported by SolidarMed and the other was one of the full time CIs based at the school but with responsibilities at the hospital. The two not involved were due to leave of absence and in service-training. The SWOT analysis was completed with one group of two CI together and the rest individually. Similar questions were used (See Appendix 1) to provide uniformity. All CI involved in the needs assessment had been working with the School since it commenced practical training at their site. Four of them were Registered Nurses (RN's) and two Registered Midwives (RM's).

In keeping with confidentiality answers from CI across all three sites will be analyzed together to see themes emerging.

Clinical instructors-overall analysis

Overall analysis of feedback from interviews with the CI's were very similar to that of the HMT and showed emerging themes included a need for more communication with the School, more support for students on the ground in terms of building up nurses as better mentors and supporting CI's or bringing more CI into the team due to demands on their time. Equipment was deemed to be lacking in quantity and sometimes in quality. There were numerous opportunities but mainly sharing experiences with another CI was seen to be the most useful.

Thematic areas identified

Discussion of themes emerging from analysis of students, HMT and CIs:

Clinical themes

- **A need for more supervision**

Analysis from stakeholders shows that there is a need for more supervision. A large majority of students expressed a need for more Clinical Instructors or for more time with the Clinical Instructors already in role in both of the assessments. The reflective exercise demonstrated the negative feelings and experiences that some had had during their first year of practice which, although would not be avoided with more Clinical Instructors, could have been better dealt with more support. They expressed that they wanted to learn, inferring that at times a learning environment was not being fostered. In direct response to this, analysis of comments from Clinical Instructors across all sites showed a frustration at wanting to give more time, but having too many demands on them and themselves identifying this as a potential threat for the training of students. Compounding this the large number of students, making poor student: CI ratios further diluted their ability to supervise all students to their desired standard. Interestingly feedback from CI indicated that they felt HMT's did not always recognise the extra demands being a CI had on their staff and did not always take that into consideration when allocating extra hospital related work. Although this is controversial as the role and incentive is in place as a recognition that the CI first have a duty to the hospital and are expected to fulfil most of the CI role alongside this or in their spare time- it is notable that the HMT were the only stakeholders not to all identify the number of CI's as a problem and their ability to effectively supervise, but chose to focus more on the negative attitudes of

other nursing staff as a barrier to sharing the teaching of students. Taking all of this into consideration, with the addition of recommendations from the GNC that best practice ratios should be one CI to 10 students, there appears to be a need for additional CI's on all sites. This would mean the work could be split between instructors better and that there would be room for one to be off site due to hospital demands and still mean there was adequate supervision for students in the clinical environment. It is necessary to use the lessons learned regarding the barriers to role performance when selecting future CI's such as those already doing distance learning or with anti-social shift patterns to avoid making the same mistakes.

Diagrams 1a and 1b below demonstrate how a 3rd clinical instructor could better meet the demands of the large pool of students. Meaning the CI: student ratio would improve and roles and responsibilities could be shared, creating better opportunities for quality teaching and learning.



Diagram 1a. In this model one (1) Clinical Instructor would be expected to directly supervise 18 students.



Diagram 1b. In a model where there are three (3) available Clinical Instructors meaning one Clinical Instructor would be expected to directly supervise a reduced amount of 6 students.

On the same theme all stakeholders recognised the potential of other nurses as being a useful resource in also combatting difficulties with supervision. 76% students said that there was a lack of support and sometimes unhelpful attitudes from other staff. Similarly HMT's echoed potential concerns about the attitude of nursing staff to mentoring. CI's saw an opportunity in building up some of the nurses to act as assessors, as something which would also help with their work load. The model shown in Diagram 2 could be a positive way to improve the learning environment in the future. This model would mean you could send more students to a site with the same number of Clinical Instructors but by securing the support of Nurse Mentors on the ground to ensure the increased number of students still have close supervision and a quality learning environment, but with a broader range of input and experiences. Clinical Instructors could then act both as direct assessors but also as supervisors of the nurse mentors and overall facilitators of the student experience on the site. This model would also benefit the hospital as it builds up the capacity of their work force and to the nurse mentors as it would count towards their Continuing Professional Development (CPD) points. Implementation of this model would require careful and sensitive capacity building and would require an outside supervisor from the School to act to provide support to the Clinical Instructors as they supervise both Nurse Mentors and Students.

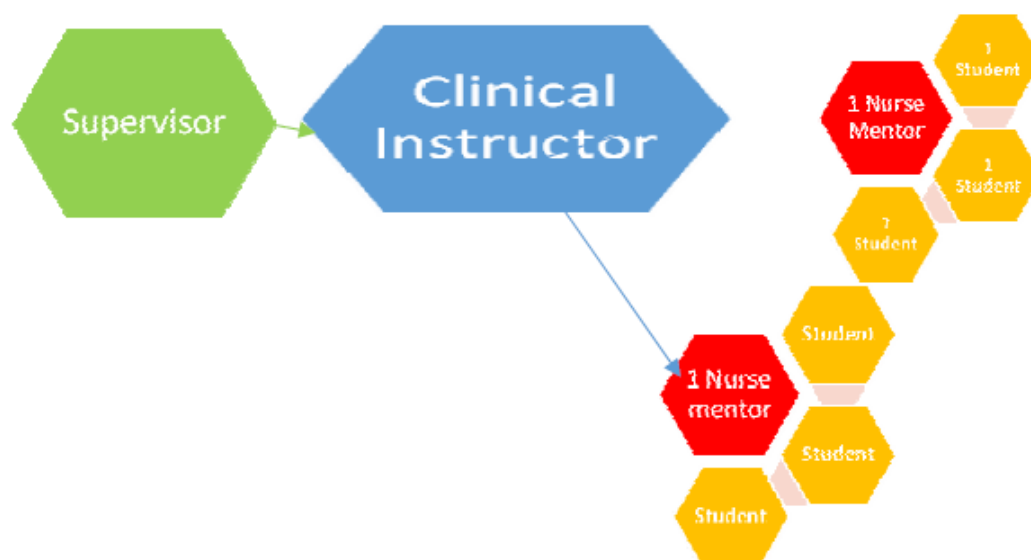


Diagram 2. Shows a model with a proposed new hierarchy with one a supervisor from the school supporting the Clinical Instructor(s), The Clinical Instructors supporting the Nurse Mentors and the Nurse Mentors working directly with the Students. In this model the staff: student ratio would be further reduced meaning 3 students would be supported by 1 Nurse Mentor, and Each Clinical Instructor would support two (2) Nurse Mentors. Still giving a CI: Student ratio of 1:6, but on the ground level the students have closer supervision.

Administrative themes

- **Communication**

The overwhelming theme arising from CIs and HMTs under the banner of administrative needs was around communication networks. Phillips & Simmons (2013) stated that good communication is essential to make everyone feel valued and in touch with what is being done. This is reflected in discussions of communication as a weakness by both of these key stakeholders.

Communication between the School and Hospital: The HMT stated that communication with the School was irregular and often delayed. CI said that the lack of face to face contact was a weakness and it was commented that this made them feel like a less valued member of the school team. Both HMT and CIs identified that a lack of notice regarding student rotations made it difficult for them to adequately prepare. There appeared to be a gap in knowledge about what was happening at the School which led to interruptions in the theory to practice continuum. Students interestingly did not identify more communication as a priority need for them, with the majority saying they could contact the school if needed. This possibly reflects the available tools for easier communication such as Facebook and WhatsApp which are used by the students but not the CI or HMT. Distance could be suggested as one of the barriers to sending timely, but despite this the analysis shows there is a need to improve the communication and that this should be seen as a high priority in the next phase, both for improving the partnership and reducing gaps created in the transition from theory to practice.

Communication between the sites:

The CI made a unanimous call for more opportunities to meet up with their fellow CI at other sites. Reasons for this included sharing concerns about specific students, learning from good practice and lessons learnt at other sites and awareness of a need to harmonise practices such as demonstrations, assessments and evaluations in to improve quality of training. Harmony between sites was also alluded to in the student's questionnaire. When asked if things were done differently 90% of students said that they were sometimes, often or always taught things differently at each site. Whilst it is acknowledged that each hospital is meant to

offer a different learning experience to the students, such differences in practice could confuse a learner and impact on their learning.

On observation by the facilitator it was seen that very good practices were taking place on different sites, but this good practice had not been shared with other teams allowing them the chance to improve their procedures. HMTs similarly stated that it would be of interest for them to occasionally meet up with other HMT in partnership with the School. Although this does not seem as high a priority as for the CIs, who have the direct contact with the students, it shows a similar need. Scher (2013) states that goal alignment and sharing a vision, as well as support from managers, all constitute part of the foundation for ongoing good morale and execution of a project. As evidence should guide best practice, and in addition that it is an area all CI identified as weak there is a strong need for more communication between the same cadre stakeholders at different sites so they do not feel they are working in isolation.

From this analysis there appears to be a robust argument for the systems to be changed to lead to more timely and effective communication between both practical sites and schools and practical sites to each other.

Procedural policies and standardised roles

Philips & Simmonds (2013) state that to make clinical improvements, roles and responsibilities of key leads in the project (such as CI) should be well defined. The analysis above shows that practices differ across sites. One of the possible causes of this could be the lack of a clear identity for CI on the project. As the role has been designed by the school and no government funded positions are available there has never been a clear job description. This makes uniformity and appraisal, both important things for quality assurance, difficult. CI stated that they did not know exactly what the 'top-up' was for. There is a clear need to define the role of, and expectations on each CI. There are few obvious barriers to implementing this change and then supervising the performance. This would also make the HMT more aware of the demands on the CI. New MOU's are also due which would give a chance to define things further and collaborate with the HMTs to arrive at an agreed and well defined job description.

Maintenance issues and consistency of food and equipment delivery were also areas identified as potential threats by HMT and CI. This was possibly down to a lack of formal policies/ procedures to follow in these areas. Infrastructure however was seen as a real strength in the partnership, but realistically closely followed maintenance schedules are required to upkeep these infrastructures. There appeared to be a willingness from the HMT to take the role as overseers, but only if formalised procedural policies were there. This could eventually could take pressure off the human resource at the school and show healthy partnership working. Face to face meetings would be the best forum for such agreements to be made and implemented and could be facilitated during supervision.

• Evaluation

70 student out of 106 stated that they were 'only sometimes' or 'never' asked for feedback after a placement. This could arguably be a potential threat as it hinders gaining insight into gaps in quality. Student input is crucial to improving learning. The HMT also highlighted that although students got chance to evaluate at the end of a placement they currently did not. Gathering feedback and actively responding to it is a way to ensure people valued as well as learning lessons. It would be important to both get and feedback this information from all stakeholders.

Progress reports currently being used to evaluate students at the end of the placement were identified as useful to the school however practices for filling them in differed at all sites, with some CI doing them in conjunction with students and others filling them in without discussion. CI stated that the number of students meant it was difficult to know what level each one was at and what their learning needs were when they arrived. Making changes to the progress report tool and standardising practice, as well as making them available to students and CI as well as the school could be needed to improve standard of evaluation.

The New Way- Recommendations

Phillips & Simmonds, (2013) stated that that actions around implementing new ways of working should first include organizing meetings to feedback findings.

Recommendations

Feedback

- Give formal feedback from needs assessment to school management, HMT, CI and students. This should be done face to face and soft copies of the assessment be made available for comment. All recommendations should be approved by all stake holders before implementation.

Communication

- Communication needs to be seamless; two way and timely.
- Agreed methods of communication between sites should be agreed (i.e. via email, letter, followed up by a phone call).
- Need to have a master plan agreed in advance and stick to it. This is needed ASAP in order to prepare for the three years of RN programme.
- There should be a notice period before rotations and objectives should be presented early enough to allow CI time to prepare the clinical environment.

Standardisation

- Documents and operational procedures should be revised and standardised for use across all sites. These documents should include;
- Clear job description and appraisal system for CI
- New MOU's with clear roles and responsibilities for each stake holder
- New operational procedures for maintenance issues
- Contracts of all staff working on decentralised sites but under School/ SolidarMed payroll to be made available to the HMT for more transparency and for them to oversee management of such persons.

Capacity building

- Interview and appoint new CI so there are 3 on each site (aim 1 x RM, 2 x RM). Need to use lessons learned if employing new CI and ensure less conflicting demands
- Nurses at decentralized practical training sites to be given teaching on mentoring by LW and CI, to build up a pool of assessors to support CI-
- CI workshops to be held to help with identification of problem students`, differing levels of training, better for continuity, shared learning, what is working, harmony of evaluation. These should be held at the School to encourage

Equipment

- 6- Month procurement should be done based on new minimum level equipment and consumable analysis. Evaluation to be done after 6 months to a=make changes and ensure sustainability of stock at these levels by School after SolidarMed project finishes
- Inventory of cupboards to be kept up to date with accountability to students and CI on stock levels and broken equipment.

Evaluation

- Evaluation needed after every placement from all stakeholders; students, CI, HMT
- Progress reports to incorporate self- assessment and to be made available or discussed between all CI so that student progress can be tracked as they rotate.
- It is thought that all these recommendations could be implemented, evaluated or supervised during regular supervision visits from the School to the sites.

Regular supervision

- Regular supervision is required to provide support and monitor implemented changes. This will also help in harmonization between the School and other sites. Supervision should be standardized, well structured, easily used and sustainable. It has been well documented (Falender & Shafranske, 2008) that quality supervision should include; ADMINISTRATION (HMT), EVALUATION (students and CI) and CLINICAL (students and CI) aspects which fits in with our stakeholders and the themes that have arisen in the needs assessment.
- This format of supervision should be trialled and a tool devised that can be used by any supervisor.

Overall conclusions of the needs analysis

The needs assessment that has been undertaken supports that the following priority areas should be addressed in order to help improve the quality of the practical training at decentralized sites: communication, capacity building, levels and quality of equipment, standardization of policies and evaluation.

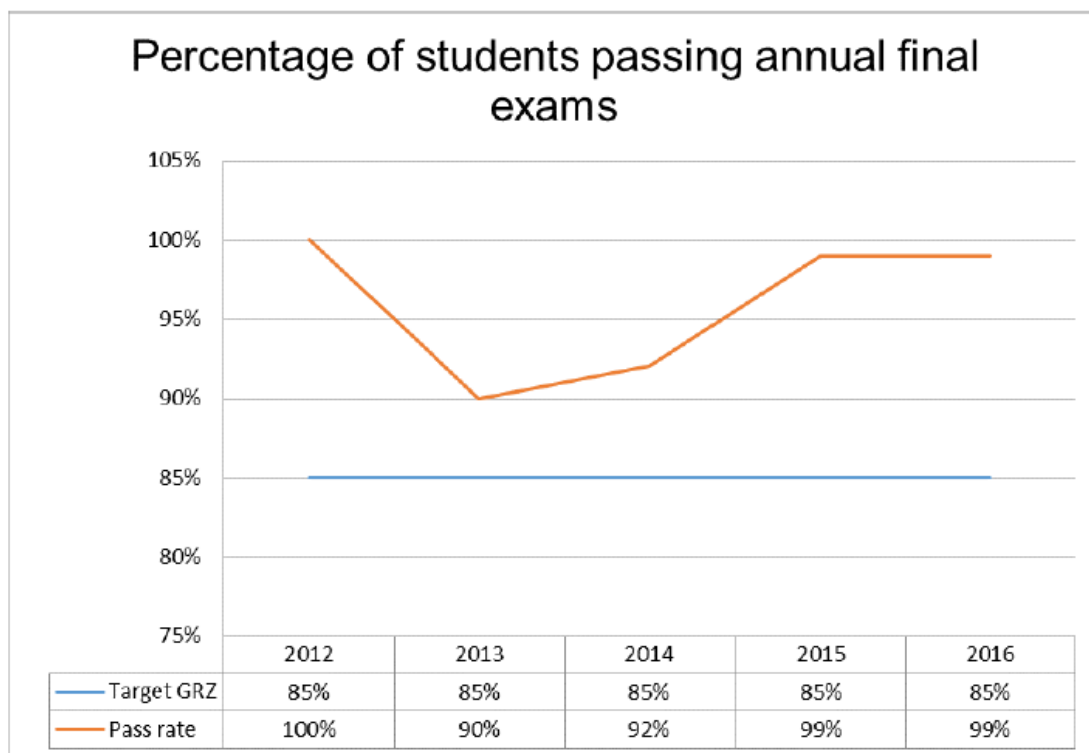
All of these areas could be covered in regular supervision trips although a simultaneous approach would be needed; looking at administrative issues, clinical issues and evaluating performance.

This needs assessment should be re-visited regularly and should be continuously managed through regular Monitoring and evaluation during supervision visits and at the end of each rotation. A full needs assessment should be conducted again after a period of implementation.

If the model of supervision is found to work one could expect to see high quality of practical training and it is hoped it that the model of decentralized training and partnership working could be rolled out to any new practical training sites.

Key findings

- Examination results (theory and practical) improved after decentralized training was implemented.



- Students report gaining a wide variety of experiences. Exposure to different hospitals is better preparing them for practice.
- The hospital workforce reports the students enabling improved patient care.
- On-site Clinical Instructors have significantly increased student supervision and teaching contact.
- The model has increased the output of graduates directly meeting the human resource crisis in Zambia.
- Local research monitored the first graduates and saw 80% posted rurally, reversing previous trends.
- The School has been recognized for its quality by the MoH for its 2015 and 2016 99% pass rate.
- National stakeholders (Ministry of Health/General Nursing Council) now recognize the pilot as a cost effective method of increasing output of trained professionals with additional benefits for the hospitals.
- Tanzanian visitors have expressed interest in adopting the model.
- Discussion
- Decentralized sites enable an institution to deliver training to higher numbers of nurses and midwives, with a better student to mentor ratio, exposure to a variety of learning environments and has proved an innovative model for increasing quality alongside quantity. This has benefits for both students and hospitals.
- Rural training equips medical professionals for work in the rural setting but demands fresh concepts such as decentralized training to better deliver the curriculum.
- This small scale innovation for practical training in Zambia can be translated to other developing countries to improve the quality of their training against similar barriers to change.

Conclusion

The Decentralised practicum sites enable an institution to deliver training to higher numbers of nurses and midwives, with a better student to mentor ratio and an exposure to a variety of learning environments. It has proved to be an innovative model for increasing quality alongside quantity. This has benefits for both students and hospitals. Rural training

equips medical professionals for work in the rural setting but demands fresh concepts such as decentralised training to improved curriculum delivery. The innovative approach of decentralised practical nurse training should be translated to other developing countries to improve the quality of training and to address the human resource crisis especially in rural areas by training people from the rural in the rural for the rural.

References

- [1]. 2011 Nursing and Midwifery Assessment Report, Zambia
- [2]. 2011 Nursing and Midwifery Assessment Report, Zambia, MOH
- [3]. Falender C. A., and Shafranske E.P. (Eds)., (2008). Casebook for Clinical Supervision: A Competency Based Approach. Washington, DC: American Psychological Association
- [4]. Ministry of Health (MoH) (2011). National Human Resources for Health Strategic Plan 2011 - 2015. Lusaka: Ministry of Health.
- [5]. MoH. (2012). National Health Strategic Plan 2011 - 2015. Lusaka: Ministry of Health.
- [6]. MoH. (2013). National Training Operational Plan 2013-2016. Lusaka: Ministry of Health.
- [7]. Phillips, J., Simmonds, L (2013) Change Management tools part 2: Managing clinical improvement projects. Nursing Times; 109: 16: 20-22.
- [8]. Rossett, A. (1987). Training needs assessment. Englewood Cliffs, NJ: Educational Technology.
- [9]. Scher (2013) 5 lessons healthcare can learn from project management.
- [10]. United Nations Development Programme (UNDP). (2013). Millennium Development Goals - Progress Report Zambia 2013. Lusaka: United Nations Development Programme.
- [11]. WHO. (2008). Global Policy Recommendations: Task Shifting Rational Redistribution of Tasks among Health Workforce Teams. Geneva: World Health Organisation.
- [12]. WHO. (2010). *Global Policy Recommendation Increasing access to health workers in remote and rural areas through improved retention*. Geneva: World Health Organisation