

An evaluation of student led health station in Finland

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ABSTRACT

This paper gives an overview of the work of Academic Nurse Clinics (ANC's) or as they are known in Finland 'Health Stations' in a wide variety of contexts. The two main aims of such clinics are to provide quality healthcare to low income and vulnerable groups, while at the same time allowing nursing students to gain important work experience in local, non-clinical settings. The paper goes on to describe the Terveyspysäkki (a direct translation is Health Stop) an ANC founded

in 1996 in Kemi-Tornio University, Finland. Reported findings of a recent evaluation undertaken by the clinic are presented, based on views of 34 clients who had attended the clinic. There are also evaluations from students. In general, feedback was positive, indicating that the Health Station provides a valuable service to the local population.

Key words: Healthcare, Academic Nurse, low income, learning, practice.

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INTRODUCTION

An Academic Nurse Managed Clinic (ANC) is a service run by health professionals whereby members of the public can access a range of health services at little or no cost. In addition, they provide a variety of clinical learning opportunities for nursing students with a particular focus on providing community based healthcare, particularly to vulnerable populations [1]. They are usually affiliated with nursing schools or universities. The Division of Nursing special projects grants show that ANC's are endorsed as places to prepare a workforce with the skills required to serve the medically marginalised [2]. In the changing health delivery paradigm of a community based health service, hospitals do not provide the appropriate clinical setting for community relevant skills. Tanner et al [3] found that community clinical settings which demonstrate good practice can be difficult to find and the study of nurse practitioner students in ANC's concluded that students were overwhelmingly satisfied with their learning experiences. The establishment in the United States of ANC's was a response to the changing needs of the healthcare delivery system by providing learning opportunities for nursing students. At that time, ANC's received mixed support from the U.S. Government and organised medicine, but they should continue to receive support as they provide opportunity for research, training and faculty practice [4]. The concept of nurse-managed centres can be traced back to the late 19th century when nurses provided healthcare in the community. The first modern nurse-managed health clinic was established at Arizona State University over 25 years ago. Today there are approximately 250 Nurse-Managed Health Clinics in the United States most of which are located near or in low income communities. Service delivery can be based in a number of different settings including school based health centres, shelters for the homeless, centres for offenders, residential domestic violence shelters, public housing for the elderly or for those with disabilities as well as the more traditional primary care centres [5].

Types of Academic Nurse-Managed Clinics (ANC)

ANC's vary in speciality and the type of service they provide. Services can include midwifery, mental health, primary care and the emphasis is usually on health promotion and disease prevention [6]. Nurse managed centres have become strategic and play a growing role as a cost effective community-based way to access healthcare services. Hansen-Turton [2], in research for the U.S. National Nursing Centre Consortium, reported that the budget spent on clients'

prescription drugs was reduced by 25% and that hospital admissions fell. Clients also visited the ANC's 1.8 more times than other providers of healthcare services.

Davis et al [7] describe an ANC established in the early 1970s located in a local shopping centre, providing a variety of services to mainly low-income clients. During 1972 - 1982 the clinic received central government funding, but has since operated as a small business. The study revealed that the ANC was open five days a week and was chosen by clients for the ease of access and affordability of care. The majority of clients are described as the 'working poor', a group generally unable to access healthcare due to cost. In the US those who are unemployed are entitled to free care through Medicare so it is those who are on low incomes and are working who could be considered the most vulnerable. Badger and McArthur [8] considered the impact of an ANC on the health and cost outcomes for a vulnerable client group. The ANC was established to provide a nursing service to low-income clients at a public housing facility in the US. It also served to provide educational experiences for students. The study used a descriptive design to evaluate: service use, health promotion, quality of care and patient satisfaction. A brief satisfaction survey based on the Health Employer Data and Information Set (HEDIS) was used, with only minimal word modification from the validated tool. The client group met the definition for a vulnerable population as being: a social group who experiences limited resources, consequent high relative risk for morbidity and premature mortality [9]. Two thirds were women; 63% Caucasian, 13% Hispanic and 11% African-American. The reading age of the majority of the client group was less than that of high school pupils. Most were widowed or single and lived alone. The vast majority were on a low income, describing their health as poor, and 10% had no health insurance. The average number of visits per patient was eight per annum. Elderly, frail women tended to visit more with an average of sixteen visits per annum.

The most frequent healthcare request identified by [7] was for blood pressure monitoring (n=459). The majority of clients in their study had other health issues but the request for blood pressure monitoring was seen as a safe way to gain access to the ANC. Help was also sought for depression, anxiety or stress (n=299) and pain management (n=123). During the study there were 437 health promotion visits.

Another service provided at the centre was a medication review which resulted in the reduction in the number of medications used and increased patient compliance with prescription advice. Quality of care was evaluated and the study found

that patients had more integrated care on site with only 1% being referred to emergency services. During the first six months of the study, paramedic calls decreased by 32% with the resultant cost-saving of approximately \$32,266. One limitation of this study was that it failed to consider other reasons for such a decrease in paramedic calls, the time of year of the study, for example, or whether there were any other local health initiatives running concurrently. Stewart and Pearson [10] followed up 342 chronic patients who were recently discharged from hospital and found that assessment of medication management at home provided an invaluable opportunity to detect and address problems and, therefore, prevent unnecessary hospitalisation. They also found that reducing medication intake to minimise cost was possible in 21% of the study participants. These findings concur with [8] who found that care was also enhanced by weekly contact which included medication monitoring and health promotion resulting in greater concordance. Northern Virginia Community College provides educational opportunities for 64,000 students annually and runs a Nurse Managed Health Centre, based on a teaching-practice model incorporating service learning [11]. It provides practice sites in community based settings for a student clinical rotations. The aims are to increase student's civic and social responsibilities whilst increasing access to free primary healthcare for the vulnerable population. There is the additional focus on health promotion and disease prevention. Each clinic is unique and represents the demographic makeup of the local community, with one clinic located in a shelter and another in a unit for abuse victims. Full health assessments are conducted, which include muscular skeletal assessments together height, weight and monitoring of basic vital signs. In addition oral health is assessed and advice given. The campus also has clinics for primary care for minor illnesses; a pharmacy, a vision care centre and a diagnostic centre are also on the site. A Women's Centre focuses on health screening for early detection of breast, cervical and colorectal cancer.

Adams [12] reports on an ethnographic assessment of an academic nursing centre in Houston, Texas. This study explored the services delivered to clients on a day-to-day basis and how the clinic could be used to enhance the professions nursing centre and nurse practitioner movements. The study had various phases of data collection and analysis, which included semi-structured interviews with 14 clients and nurses. The services provided at the centre included physical examination and primary healthcare, including immunisations, family planning and women's healthcare. At the time of data collection, approximately 40 clients

visit the clinic per day. Interviewed clients felt that the atmosphere of the centre was genuinely caring and were confident of the nurses' reputation. The nurses who were interviewed liked the autonomy the clinic offered in the delivery of care as well as the focus on team work. The study highlighted the unique collaboration between the school of nursing and the medical centre community.

Pohl et al [13] looked at the characteristics of schools of nursing operating ANC's. They sent a survey to 638 deans and directors of higher degree and baccalaureate nursing and received an 83% response (n=565). Responses showed that 92 schools of nursing had one or more ANC's and financially supported the centres. They offered an invaluable primary care experience for nursing students and provided an important link with the community.

Measuring Health Outcomes

Badger and McArthur [8] found that accessibility of care was a paramount benefit to the clients, who were, if necessary, able to visit the ANC weekly. Prior to the establishment of the ANC, clients would have had to wait up to six weeks for an initial appointment. The patients tended to develop therapeutic, on-going relationships with the nurses, which were positive for healthy lifestyle changes and compliance with treatment. Client satisfaction surveys were completed by one fifth of the patients (n=18) and revealed that 57% were completely satisfied with their care and a further 36% were very satisfied.

Davis et al [7] argue that outcomes should be measured more effectively in the ANC context and that definition of good health be redefined to include measures concerned with well-being and quality of life. Thus, measures such as personal evaluations of general health, as well as assessment of ability to perform daily personal tasks should be included. Their study explored the documentation of health outcomes at a Community Health Services Clinic in Arizona, U.S. They looked at 100 randomly selected patient records to explore whether quality of life measures were being recorded.

Unfortunately, very few such measures were included in assessment about health outcomes. Anderko [6] comments that quality outcome measures are a vital way of evaluating care for the increasing number of medically underserved at ANC's, and quality data should be published. Ellenbecker et al. [14] describe the benefits of providing health promotion and disease prevention services at an ANC in Massachusetts, U.S.

The outcomes showed improvements in the health of older clients living at home, through increased access to care management, of high blood

pressure and close monitoring of long-term health issues.

Students' Learning Outcomes

Connolly [11] examined students' learning outcomes at an ANC in a Northern Virginian College. Benefits to students included: working with patients from different cultural backgrounds, learning how to set up and run a clinic as well as develop leadership skills. Students often faced language and cultural barriers, and a supervisor helped them learn to overcome misunderstandings arising from providing care for a diverse client group. Students learnt to consider psycho-social issues, which often contribute to non-adherence to prescription medication for hypertension. During the study the students evaluated their learning with the use of reflective journals where they detailed their emotional reactions as well as clinical decisions and interventions. Reflective journals encouraged critical thinking and enabled monitoring of documented progression. This supports [15] views about student reflection who argued that 'structured reflection as part of educationally led supervision will enable students to develop their reflective skills'. Connolly [11] found that students gained from working alongside registered nurses and learnt to appreciate different practitioner skills and role models. They also benefited from learning about the variety of nursing career paths available. An evaluation study of learners' perceptions in four ANC's in Michigan, U.S found the integration of academic and practical learning very effective for nursing students. The students reported that being mentored by a nurse practitioner was valuable, and they learnt to apply an understanding of their patients' economic, social and cultural situations to treatment decisions and patient education [3]. Similar findings are reported in a paper by [16] who analysed the responses of 79 nursing students in a qualitative study. Students reported that they increased their knowledge of health issues in relation to low income populations.

Reising et al. [17] also looked at nursing students' perceptions of learning outcomes achieved from the working at the ANC. The data collection method included a Likert type response scale and an open ended questionnaire. The students felt their clinical skills improved; particularly, blood pressure monitoring, counseling and care planning skills. Another key outcome was that they felt a professional commitment to the health of the community. The major negative theme from the research concerned students' time commitments and perceived lack of preparedness for the work.

Costs and Funding

Badger and McArthur's [8] findings indicate that ANC's in the U.S. are funded through central government and are mainly concerned with providing healthcare to disadvantaged populations. Barger [18] reports that federal funding in the U.S is usually for five years, after which time ANC's need to learn to function in a commercial way, in a business environment to ensure they survive. Miller et al [19] strongly argue that ANC's should seek to generate revenue by being more business orientated, by focusing on strategic planning, marketing and recruitment.

Coddington and Sands [20] reviewed the cost of healthcare and quality outcomes of patients at nurse-managed clinics. A consistent theme in their report is the value of care which the nurse managed clinics provide for the poorer populations. They also comment that much of the preventative services, health promotion and medicine management, increase compliance with treatment and reduce hospitalisation. Additionally [20] stress the importance for nurse-managed clinics to claim reimbursements through Medicaid and third-party payers to enable them to remain viable. Barkauskas et al [21] on the other hand, recommend that a comprehensive evaluation plan be developed to assess the outcomes of ANC's. The evaluation should include measuring the clinic's impact on clients and communities served by students and universities.

MATERIAL AND METHODS

Search Strategy

The key words used to access relevant literature from electronic search data bases included: health stations, nursing placements in non clinical areas, clinical placements in college, nursing students offering service to community from college, supervision of final year students caring for public, ethical issues concerning students offering paid service from college, empowering students to deliver care in non clinical placement. The electronic search was conducted using CINAHL, Medline, and was searched from Jan 1990 - December 2010. Owing to the dearth of literature the inclusion of categories and the time frame was very broad so as not to restrict findings. The search revealed a U.S. bias with regard to the current literature; the majority of articles focused on the U.S. context. Although not directly relevant to Finland, nonetheless, some of the findings from the literature can be used to support the importance

of this service to students and local population.

The ANC's in Finland are differently funded and the following section reports on the work of the ANC known as a Health Station at Kemi-Tornio University of Applied Sciences. The evaluation of the student/client experiences are summarised and reported below.

Terveyspysäkki - Health Station in Kemi-Tornio University

Finland's population is approximately 5.2 million. Finland has a decentralised health system where chief physicians in municipalities are responsible for planning both primary and secondary care for the local population. The country is divided into 448 municipalities and has 250 public health centres [22]. In the 1990s the Finnish healthcare system survived the severe economic crisis by marked cuts in public sector spending including health [23].

Kemi is situated near the Arctic Circle and is an industrial centre of Lapland. The main economic activity in the area is centred on paper and wood pulp mills and the only chromium mine in Europe. Kemi's population is 22,641 (with 19.3% being over the age of 65) and the nearby town of Tornio has a population of 22,459 (with 15% being over the age of 65). In April 2007 the city laid off all its municipal workers for two weeks in response to the falling economy of the city. The health funders in Kemi are aware of the spiralling healthcare costs so Health Station provides a vital service to the local community.

The Health Station was established in 1997 in the Unit of Healthcare, situated within Kemi-Tornio University Applied Sciences (then a polytechnic). One of the primary drivers for the establishment of the Health Station was to provide relevant community placements for students. As the literature review outlined, the majority of ANC's in the U.S. are affiliated with nursing schools or universities and provide placement areas to prepare the workforce with skills required to serve the medically marginalised [24;2]. In establishing the Health Station, consideration was taken of the impact on the local community, the students and the importance of the long-term commitment to the clients and to the community. It was important to ensure that sufficient funding would be available to maintain the Health Station. Wink [24] in her paper on ANC's emphasises the importance of schools of nursing considering the implications for providing a Clinic and the long term commitment to both the community and the individual clients.

During the previous year (1996- 1997) the Health Station offered a limited service where the public could only have their blood pressure and

vital signs checked. This service was very popular with the local population, with 285 people attending for blood pressure checks. The Health Station offered value for money. The needs of the older local residents were taken into consideration with early opening times to enable clients to attend the clinic during the light part of the day. The supervised clinic is usually open from Monday to Friday, 8.00 to 12.00. The majority of clients are elderly, unemployed or employees on a very low income. ANC's are usually established where vulnerable groups have difficulty accessing healthcare [2]. The mission of the Health Station is to treat all clients equally, with respect and dignity. The client group now includes students from the Unit of Healthcare and Social Services at Kemi-Tornio University which increased the number of those who attend the clinic as well as expanded the age range thus providing a greater breadth of experience for the students placed in the Health Station; (see Table 1) for type of services provided. Allowing faculty students to attend the Health Station as clients was implemented as a result of requests from students. Students find it convenient to access healthcare at the university. The confidentiality of those attending the clinic is paramount. It was recognised that in accepting clients from within the student faculty it was necessary to give ethical consideration to both the attending client and the student; providing care by giving the opportunity to opt out of the interaction and stress that confidentiality will be strictly applied. This prevented any conflict of interest or embarrassment on either side. Students requiring care are aware that care or advice is likely to be given by peers and have the option to see a supervisor only. The university team concerned with running the Health Station consists of two academic supervisors, an education manager, principal lecturer, and two other academic staff.

Since 1996, a total of eleven faculty members have provided supervision to nursing students on placements at Health Station. These include public health nurses, general nurses, physiotherapists, and rehabilitation nurses. A faculty member regularly liaises with students and helps them to integrate theory with practice. This aspect was also deemed very important by [3] who found that students' understanding of psychosocial and medical intervention issues improved by talking these over with a nurse practitioner.

Nursing students are at the end of the 2nd year of study in a three and a half year programme. There are usually four or five students on placement at any one time. They spend between three and four weeks on placement at the Health Station. In an evaluation in 2006 it was found that three weeks was considered too short, so best endeavours are made to ensure that four weeks are spent at the

Station. Students work a total of 32 hours a week during their placement. Students spend the afternoons working in pairs, sometimes in local community centres or in patients' homes. On these occasions a supervisor is available and may work alongside students to ensure that safe practice is adhered to and that they feel supported whilst at the same time gain from the autonomous experience. During the four week placement students are

encouraged to set their own goals, and although the curriculum stipulates that they cover certain aspects of clinical practice, students are able to self-determine what they want to achieve on the placement. These goals are usually set by the students during the first week and are discussed with the academic supervisor. The supervisor is responsible for giving regular feedback to students while on placement.

Table 1. Services provided and numbers of clients who visited the Health Station in Kemi-Tornio University of Applied Sciences during 2008-2009.

Tests and procedures		N
Blood tests	HB	351
	Glucose	182
	Cholesterol, HDL-cholesterol, triglycerides	335
	Liver function tests	54
Health checks (physical examination) for people under 60 and students (including checks of BP, HB, cholesterol)		165
Health checks (physical examination) for older people		115
Foot care		84
Other services	Home calls	124
	TPR and BP checks	324
Health promotion in groups (lessons and theme days)		24

One of the advantages of the Health Station for nursing students is that it offers an environment whereby students can practice using an array of medical equipment provided by the university. One of the challenges that students face is to work in the open learning environment where the aim is to develop as practitioners, learning a new set of skills. At the end of their placements, students are invited to evaluate their experiences by completing a questionnaire. Students are asked to comment on a number of issues such as the efficacy of supervision, their expectations prior to commencing the placement, and how practice interrelates with theory.

Ethical considerations

The questionnaires were anonymous and it was very important to ensure that students did not feel vulnerable and felt able to give accurate answers to the questions. The students overall practice would be assessed by the academic faculty so it was important to ensure confidentiality was maintained. The University does not have the formal safeguards of research ethics committees but adheres to professional and ethical standards regarding minimising harm by keeping data safely, maintaining confidentiality, gaining consent; free from coercion and giving adequate information.

Data Collection

The evaluation reported in this paper took place in the Health Station during January and February 2009 and focused on Kemi residents over 75 years of age who were not in receipt of home care and did not regularly visit their doctor. The assumption was, therefore, made that they were in reasonable health. The students carried out physical examinations on these clients at the Health Station with support from home care nurses who made themselves available during the examinations. The examinations on the clients group included blood sugar monitoring, blood pressure and pulse taken, weight and height recorded, and assessment of hearing and balance. The self-completed anonymous questionnaires were originally designed by the Health Station Supervisor. Consideration was given to the use of a previously validated questionnaire but it was felt that one specifically designed for the study would be more relevant. The questions were kept short as recent research has shown a direct relationship between response rate and questionnaire length [26]. The questionnaires were handed out personally which has the advantage of ensuring a greater response rate. Participants were required to return them anonymously, by placing in a return box and therefore did not feel pressurised [27]. The high

response rate suggests that students felt confident of the safe guards put in place by the faculty to maintain their anonymity. The results presented below are based on questionnaires completed by 40 students in spring 2009.

Data analysis

Completed questionnaires were read by two lecturers involved in supervision at the Health Station. Students' responses to open questions were sorted by themes which broadly fell under these titles: working independently, taking on responsibility, building therapeutic relationships and health promotion. The overall findings were then reported to all staff involved in the Health Station. A summary of these findings is presented below.

RESULTS

Students reported that they valued being able to work independently but with a sufficient level of supervision. This gave them the freedom to develop new skills relevant to becoming independent practitioners. Such a pattern of work helped them gain confidence and initiative to become proactive autonomous practitioners. The Health Station's client group were diverse as they ranged from the student population to the vulnerable elderly, thus giving students the opportunity to improve their communication skills through assessment, treatment and health promotion with this varied client group. Students also took on the responsibility of arranging appointments with other health professionals, developing treatment plans, documenting treatments, and ordering necessary equipment. They also gained experienced working in a range of different environments including client homes.

The students additionally felt they learnt how to become part of a multi-professional team and liaise across professional boundaries. Some students reported that they would have appreciated more co-operation between physiotherapy students and students from other disciplines. One limitation of the evaluation is that other student professions at the Health Station did not have the opportunity to comment on the experience which may have supplemented the findings.

Students reported that supervisors were friendly, professional, and supportive of students. They valued honest feedback from supervisors about their skills and need for development. They

felt supervisors gave them sufficient time and helped develop their knowledge and clinical skills.

Students were in their second week in the Health Station placement and received training prior to undertaking physical examinations. They also attended group meetings with experienced staff after all the examinations had been completed. Students discussed each case with an identified staff nurse to ensure that all relevant issues which were of concern to the client had been considered. These could have included follow-up appointments with a Doctor or home visits by health professionals. From data collected from clients it was evident that they felt the Health Station provided a friendly and relaxed environment which was beneficial to open communication.

One relevant criticism was the lack of privacy due to the examination cubicles being divided only by curtain, meaning that occasionally consultations could be overheard. However, clients were overall happy with the services provided and felt that nurses received good clinical supervision. The negative feedback highlighted by the clients regarding the lack of privacy is being considered by the Health Station management team and they are investigating viable alternatives.

Evaluation feedback was sought from the 34 clients who had undergone an examination. The initial contact with the Health Station and during the subsequent first attendance, all participants felt the service had been approachable and friendly with 32 commenting that their needs had been met. All participants felt that the nursing students acted professionally and they received sufficient advice, information and guidance. The age of clients in the study group was taken into consideration when designing the evaluation questionnaire for clients. It was kept to a simple format and was quick to answer.

The questionnaires were given out at the end of appointments and clients asked to place completed ones in a box. The sample of key questions used in the questionnaire is outlined in Table 2. There were also questions which enquired about demographic information and an uptake of any previous health services. The responses in Table 2 demonstrate that the majority of clients who participated in this evaluation were happy with the service received and felt that the tests were beneficial, in terms of general health assessment and receiving information on health promotion. Clients, who perhaps felt obliged to respond positively particularly if they planned to use services in the future.

Table 2. Key questions from the questionnaire

Key questions	n=34	
Did you get support to promote your own health?	32	2
Was information given easily understood?	34	0
Was the service you received undisturbed by interruptions?	33	1
Did the students pay attention to you, when the examination was complete?	31	3*
Did you feel that the physical examination was necessary?	34	0

* Feedback from 3 clients who were not totally satisfied was discussed with the students.

DISCUSSION

The Kemi-Tornio Health Station is a good example of an ANC which provides opportunities for nursing students to develop their skills to work independently. Working with a wide range of clients with differing healthcare and social needs, and the opportunity to develop teamwork skills with other health professionals offers students a very useful experience. It seems clear from the findings gathered from the recent evaluations that this ANC is providing a valuable service to the local population.

Health promotion was a key factor and required the students to build therapeutic relationships with the clients, gain insight into the clients' perception of their own health and advise accordingly. The students learnt about disease and infection prevention and gained the necessary skills to analyse and interpret test results. Because health promotion embodies empowerment, equity and collaboration, it values clients' views and gives them greater perception of control [28]. It was these tenants which were important both to the healthcare professionals, the students and also to the client group.

Simonsen-Rehn [29] paper suggests that health promotion in the community is vital to the reorientation of Finnish health services. Access to data on the local populations' health and living conditions is very important in the planning of community services. The Kemi-Tornio University Health Station can provide vital data in the planning of local community care.

The results from this evaluation led to changes in collecting students' feedback. Apart from an evaluation questionnaire, current students are required to write a reflective report on the learning acquired during their placement at the Health Station. The collection of feedback from clients has also been reviewed. In spite of questionnaire limitations and a small sample, it seems clear from the findings gathered from the recent evaluations that this ANC is providing a valuable service to the local population.

This evaluation was limited to one-off collection of data from students and clients. The excellent response rate maybe due to the fact that questionnaires were handed to the individual clients, who perhaps felt obliged to respond positively particularly if they planned to use services in the future. A better approach would be to leave questionnaires by the door and alert clients to them targeting all and not just older people. This strategy will be used in the future.

CONCLUSIONS

From the evidence provided by the literature, ANC's appear to be an effective way of providing healthcare to low-income and vulnerable groups, while also allowing nursing students to gain valuable experience in local, non-clinical settings. This experience can be particularly challenging for students and encourages them to develop skills in critical thinking and reflectivity. Evidence suggests that the health promotion provided by the ANC's can reduce hospital visits with the resultant long-term cost saving.

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