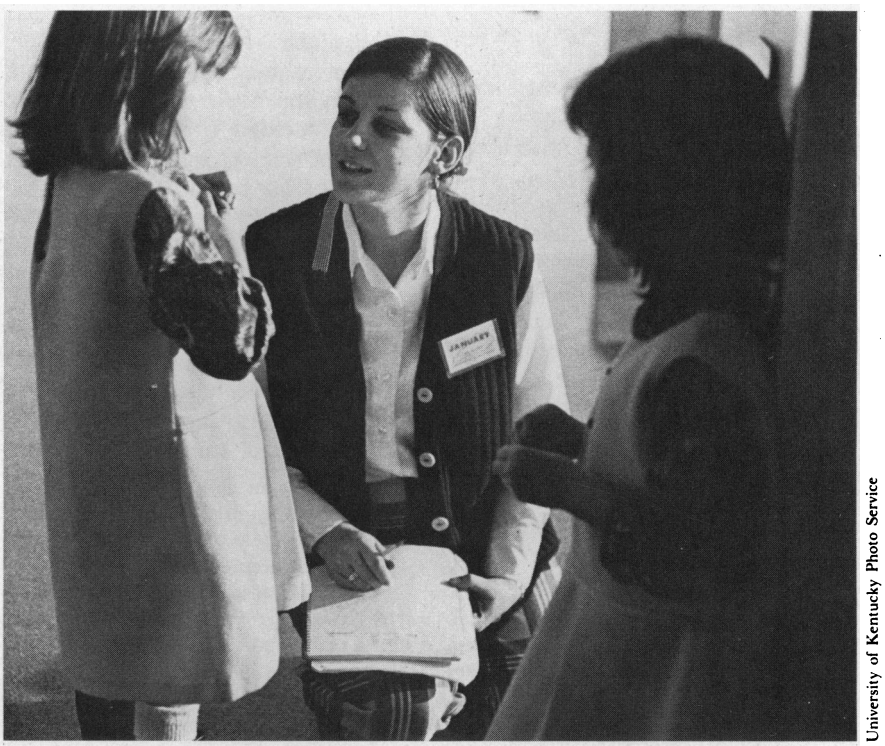
Interdisciplinary Education for Health Science Students in the Rural Home Health Agency

Kentucky January

TOM CONNELLY, Jr., MHA, RUTH ASSELL, MS, and PATSY PECK, MS

TEACHERS IN ACADEMIC health science centers have spent years developing the appropriate methodology to make their students among the most technically competent products that educational institutions have produced. However, there has been less emphasis on preparing students to cope with the process of the delivery of their technical skills. Students who have been taught to function in the confines of an academic center have had difficulty adjusting to the community environment in which health care is practiced.

The necessity of rounding out health science students' education with a knowledge of the community environment was recognized by the faculty of the College of Allied Health Professions of the University of Kentucky in the fall of 1971. The faculty voted unanimously to suspend classes for the month of January each year so that students might go to local communities throughout the State and see for themselves how community health systems functioned. The students were to be formed into interdisciplinary teams, including a faculty member, and reside in the communities. Students would receive three academic credits for their field experience. The concept was called Kentucky January. The major objectives formulated for the project were to provide students opportunities to see and feel a local health care environment and to share, in a team approach, their experiences with those in other disciplines. Support for developing and implementing Kentucky January was obtained through a special project grant from the Division of Allied Health Manpower (now the Division of Associated Health Manpower) Health Resources Administration.



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Kentucky January student nurse makes a home visit. Students from several University of Kentucky colleges participate in the yearly program

Kentucky January 1973, 1974

The activity focus for the initial Kentucky January project in the 1972-73 academic year was a 1-week orientation on campus to the health care systems and 2 weeks of living and observing in the field. Students rotated through hospital departments, home health agencies, local health departments, physicians' offices, dentists' offices, mental health centers, nursing homes, and other community-based health agencies. In the initial

☐*The authors are at the University of Kentucky. Mr. Connelly is director, Office of Special Programs; Ms. Peck is assistant professor of physical therapy, College of Allied Health Professions; and Ms. Assell is assistant professor and acting director of the Division of Community Health Nursing, College of Nursing.*

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program, 82 students from 10 disciplines and 14 faculty members were formed into 14 teams, and each team was assigned to a Kentucky community *(1)*.

Dydactic models of the health care environment and the delivery system were presented on campus for students to use as background for their subsequent field observations *(2)*. In its first year of operation, the Kentucky January concept won overwhelming acceptance among students as an experience in team effort and in learning about the health care environment.

Evaluation of this first effort led to a basic redesign of the field program, with a major reduction of the time spent in orientation and an increase in the field experience time *(3)*. Our evaluation also pointed to the students' desire to have a "hands-on" experience, that is, to actually participate in patient care. In addition to the student interest, there was faculty interest in developing a patient care or clinical team experience.

Working with program staff, a task force of two faculty members and a graduate student from the physical therapy department began the design of such a clinical experience for Kentucky January participants. Its objectives were more specific and more numerous than those for the initial effort. The clinical team experience would provide students with—

1. Opportunity to explore the health care delivery system through provision of direct service to patients or their families, or both
2. Experience in identifying factors affecting health care with a "family and community focus" and experience in defining treatment goals based on the patient's total situation.
3. Opportunity to develop a flexible, user-oriented concept of the health care team by allowing students to structure care around the needs of the patient. Members, function, and duration of the team could be altered as indicated by the patient's needs.
4. Practice in functioning as a health professional with a unified purpose, namely, the well-being of people, and with a team-shared responsibility in planning for the achievement of goals established by the group.
5. Strong professional role identification through observation of the unique contributions of each team member to health planning and through the experience of relating their own special skills to the common purpose of the team.
6. Insight on the need to strive for more organized and less fragmented delivery of health care services.

With an agreement reached on these objectives (and it was not easy), the task group deliberated about the setting in which to attempt the patient-oriented field experience. Suggestions ranged from neighborhood health centers to neighborhood clinics. It was finally decided that home health agencies (HHA) would provide the most flexible base of operation for the students as well as allowing them to see the patient's environment rather than an institutional environment.

The task group then went to work to devise guidelines. Relying on their past Kentucky January experiences, the group decided on five major areas of student activities:

1. The student team will review patient records or referrals from the base home health agency, select and evaluate patients, and hold conferences to discuss their findings and to plan for services as indicated.
2. Evaluation of the patient's total health environment and planning for health care must be done in conjunction with community sources (health departments, school health nurses, and other public agencies) as well as family visits.
3. Each student team member must have a professional resource person in the community (HHA staff preferred).
4. Direct service to patients will be initiated only if plans can be made to continue it after the students depart.
5. The faculty sponsor can and should offer guidance in the team's planning process during each phase of the clinical experience, but he should not impose his ideas on the group.

Additional guidelines for faculty and total team responsibilities were also developed.

Sponsoring agencies in two contrasting sites were solicited for the initial clinical team experiment in 1973-74—Harlan Appalachian Regional Hospital's home health agency and the Visiting Nurse Association of Louisville. The directors of both agencies were extremely receptive to the project, and they participated in the development of the final guidelines. The Harlan site is extremely rural and Louisville, of course, is urban. The sites were chosen to determine if the teams could operate best in a rural or an urban setting, or equally well in both.

Resolving the issues of sites, activities, and guidelines cleared the way for the determination of who would participate. Because the clinical team experience was a developmental program of the College of Allied Health Professions, it was decided that greater commitment to continue it would be given if the initial faculty sponsors were selected from that college rather than the other colleges of the University of Kentucky that were also participating in Kentucky January.

Deciding which students should participate was more difficult. It was initially determined that the teams would consist of students in the final semester of their professional education and be chosen from patient care-oriented disciplines, such as nursing and physical therapy, rather than diagnostic disciplines, such as radiologic technology, to provide an easier transition from campus to fieldwork in direct care of patients. Medical technology, the exception, was included to determine what role that discipline could play in a care-oriented effort. Students were recommended by their department chairmen for the two teams. The 1973–74 participants were 13 students from seven disciplines—physical therapy, nursing, medical technology, dental hygiene, community health, speech and hearing, and respiratory therapy.

During the 3 weeks in January 1974, the two teams provided direct care for 70 patients and conducted educational programs for more than 450 children, professional staff, and patients. The faculty learned several lessons from the 1973–74 effort:

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Team meetings before and during field phase are an integral part of the Kentucky January experience, as future health care providers learn to work together

1. Clinical teams are viable, but they require students with certain personal characteristics such as creativity, flexibility, and initiative.
2. In addition to home health agencies, which provide experience in home visits, other agencies such as health departments, day care centers, geriatric health centers, and school health systems are viable entities for putting student clinical teams to work in the community.
3. The faculty member's input varies with each team, but he should have the final say in the selection of its student members.
4. Urban and rural teams will function in the same manner.
5. The 3-week experience is a good one, but it requires extensive preparation on campus before placing students in the field.

In the 1973–74 and 1974–75 academic years, we have placed a total of 26 students who comprised 6 clinical teams in the field. In 1975–76, we hope to place 5 teams and between 30 and 35 students. While both urban and rural sites seem viable, we are placing major emphasis on rural Kentucky. We have found that, generally, community acceptance of students is greater in the rural areas where we would like to see more of our graduates practice.

In addition to this effort in clinical team education, Kentucky January has continued to put observational teams in the field. For 1973–74, 154 students (observational and clinical teams) were placed in 27 sites and in 1974–75, a total of 152 students were placed in 28 sites.

The following narratives of the 1974–75 rural clinical teams in West Liberty and Morehead detail their field experiences.

West Liberty

The West Liberty clinical team was composed of a pastoral counseling student (a doctoral candidate at Lexington Theological Seminary), two student nurses (University of Kentucky College of Nursing), a physical therapy student, a dental hygiene student, and a community health educator student (College of Allied Health Professions). All except one of the students had grown up in urban areas. A student's interest, enthusiasm, and clinical expertise and the faculty sponsor's choice of a student in a discipline that would best meet the health care needs in the community were the criteria for selecting team members. A member of the division of community health nursing, College of Nursing, was the faculty sponsor of the team.

Preparations. After the members were picked, a series of bimonthly meeting were held on campus to allow the students to get to know each other and to begin the process of group solidification as well as to discuss rural health care delivery, health values and beliefs, and the logistics of the forthcoming fieldwork. To facilitate planning, the team visited West Liberty in November 1974 to meet the location coordinator, who was the registered nurse in the home health agency and her staff, to tour the Morgan County Appalachian Regional Hospital and meet some of the staff, and to meet health department personnel and county officials.

The site. West Liberty in Morgan County is approximately 100 miles east of the university's Lexington campus. On the western edge of the Appalachian plateau, the county's 369 square miles are nestled in the foothills of the Cumberland Mountain range. The hills are interspersed with fertile valleys, and the Licking River bisects the area.

The team's base institution, the Morgan County Appalachian Regional Home Health Agency, is housed in the hospital. The hospital has 25 beds for acute care and 25 for extended care. In addition to inpatient and labor and delivery services, it provides emergency room, pharmacy, radiology, medical technology, and dietary services.

Serving Morgan County and portions of Wolfe, Powell, Menifee, and Magoffin Counties, the HHA is staffed by a full-time registered nurse, a licensed practical nurse, a home health aide, and a clerk. A registered physical therapist and a nutritionist are available for part-time and consultation services. In addition to its ties with the home health agency, the clinical team worked closely with staff of the Morgan County Public Health Department and school officials.

Student activities. The team began its first week in West Liberty in January by becoming more familiar with the community and its people through interviews with health care providers, businessmen, and politicians. In addition, records of HHA clients were reviewed and a caseload for the students was selected. Joint home visits with the

HHA staff were arranged to introduce students to families and give the students an overview of the philosophy and functioning of the agency.

The team divided into two groups according to interest and primary emphasis. The physical therapy student, the pastoral counseling student, and one nursing student concentrated on home health and worked with the location coordinator. The others—the second nursing student and the dental hygiene and community health students—worked primarily with the schools and on environmental health. Their principal resource person was the public health nurse in the county health department. Although each group had a different focus, each student participated in both groups either directly or as a consultant to his fellows.

The team initiated joint planning with the principals and teachers in two elementary schools to arrange health education programs for first graders and mass dental and vision screening for first, third, fifth, and seventh graders. The plans included home followup visits of students with severe dental or vision problems, and these visits were to be concentrated on the families of first graders.

During the first week in West Liberty, the students also participated in several community activities—hypertension screening sponsored by the Kiwanis Club, a planning meeting of the newly formed county drug and alcohol abuse council, the meeting of the local district nurses' association, and a community square dance.

By Friday, January 10, both groups had completed final plans for the accomplishment of their fieldwork. But the young people decided to spend the weekend in the community to gain insights about life in a small town by attending religious services and immersing themselves in local weekend activities. Sunday brought snow, however, and by evening, West Liberty was blanketed in 10 to 12 inches. The heavy snowfall caused all the county schools to close for the next 6 school days, effectively disrupting the plans of the school-focused group. Those who were involved in home health could make no home visits on Monday and Tuesday and, for the rest of the week, they could only reach families who lived on well-salted roads. Team members were able, however, to provide backup at the hospital for employees who were unable to get to work.

During the second week, the team revamped its plans several times as they tried to cope with the effects of the bad weather. They had had dramatic first-hand evidence that health care delivery in a rural area is determined not only by the adequacy of the system but by the forces of nature. Health care delivery in the community at this particular time had come to a screeching halt.

The third week was a flurry of activity as the team tried to carry out their postponed plans. Despite the weather's intervention in the second week, 29 home visits were made to 17 families, the dental and vision screening in the two schools were completed, and classes in dental hygiene and nutrition were held for first graders at both schools.

Five of the 17 families were seen four to six times during the week; the others were visited only once. The majority of the families lived off the main roads, and students had to park their cars and walk up creekbeds or hike across fields to reach the homes. The students, without exception, were welcomed by the clients and their families. However, the team did not have enough time to evaluate adequately the implementation of their plans.

Evaluation. During their 3 weeks in West Liberty, the team identified and explored numerous facets of the delivery of health care in rural areas as well as their ability to function as a team.

Initially, the students experienced feelings of loss and frustration. The technological backup that is available in a large university medical center is not at one's beck and call in a rural community. They became acutely aware of the need to rely on their own expertise and that of other disciplines represented on the team as well as that of their community resource people.

Their concept of a holistic approach to total patient care became heightened. As the field experience progressed, seeking consultation from a colleague became automatic and natural in assessing and planning to meet each client's needs. They became keenly aware of the importance of each team member's contribution to the provision of total care for a patient. From their own experiences came the realization that health care providers in a community must have close ties, not just in theory but in practice, if the health care needs of the people are to be met. The milieu of a small rural community is conducive to learning this important concept because the student can look at a microcosm; he is acutely aware of the effects that gaps in the system can have on health care.

Morehead

Preparations. A nursing student, a dental hygiene student, a community health student, a medical technology student, two physical therapy students and a physical therapy faculty member formed the team that went to Morehead last January. Like the West Liberty clinical team, they had spent about 20 hours during the fall semester getting to know each other, setting up goals for their fieldwork, and developing a patient evaluation form. They used group dynamics so that each student was an active participant. The faculty sponsor's role was that of handling logistics—initiating the group process at the first meeting, setting broad areas to be considered, sending reminders of meetings, and arranging for a visit to Morehead in November so that the group could get acquainted with the location coordinators.

The site. The town of Morehead, the home of Morehead State University, lies in the hollow between two ridges of the Appalachian foothills known as the Knobs. Its permanent population of 7,200 is augmented by the university community of some 6,500.

Business premises and the Rowan County Courthouse line the one main street, U.S. Highway 60. The rest of the town is built along narrow, terraced streets parallel to the main street and connected by equally narrow vertical streets. One student commented, "No wonder the county is dry. They could never drive up here if they were drunk."

Lumbering, the milling and processing of wood and wood products, and clothing manufacturing are the major industries in the five-county Gateway Area that includes Bath, Menifee, Morgan, and Montgomery Counties as well as Rowan. The larger economic community also includes Fleming, Lewis, and Carter Counties.

The largest health facility is St. Claire Medical Center, a modern 100-bed general medical and surgical hospital. It was built 10 years ago by the Sisters of Notre Dame in response to petitions from a local physician and the town's officials for assistance in establishing a hospital. The hospital is operated by the religious order and has, in addition to medical, surgical, and obstetrical facilities, a well-equipped laboratory, a physical therapy department, an intensive care unit, a blood bank, and a psychiatric service. The St. Clair Home Health Agency, an extension of the center, provides skilled nursing, physical therapy, and homemaker services for patients following hospital discharge. Two Sisters of Charity, who came to the area 2 years ago from New York, administer the HHA, which was the base institution for the clinical team. The staff consists of two full-time nurses, a part-time physical therapist, a homemaker, and two homemaker's aides.

The town has other health care resources. The Morehead Clinic is manned by five general practitioners, two pediatricians, an obstetrician, and three internists. Cave Run Clinic, a surgical clinic, is staffed by three general surgeons and two orthopedists. Three dentists operate a clinic that is comparable to some and superior to most dental clinics in metropolitan medical centers. They use sophisticated equipment and treatment methods and emphasize dental care education and preventive dentistry. Two physicians and one dentist are in solo private practice in Morehead.

Student activities. When the students arrived there in January 1975, they were housed in a Morehead State University dormitory, but the Sisters of Charity assumed responsibility for their hospitality. The Sisters' warmth and openness, and the easy pace and friendly hospitality of the townspeople, won over the students immediately. The immediate past director of the HHA gave a party for the clinical team and for an observational team that was concurrently in Morehead. The party gave the students an opportunity to become familiar with the officials of local health-related organizations.

The team met one evening in Owingsville with the Gateway Comprehensive Health Planning Council and at another time with the local regional development agency. Plans for bringing industry, and a subsequent increase in population, into the area were challenged by the team on ecological grounds, and a lively discussion ensued.

Each student made trips with the HHA nurses, often up dry creekbeds or on deeply muddied roads in jeeps to visit patients and to evaluate their health environment and the needs of the patient and his family. Soon the students were permitted to evaluate and make treatment plans and to go alone or with another student to a patient's home to implement plans. However, they had to keep in mind the dictum that no service could be initiated that could not be continued by available personnel after the students left.

The students managed to make 330 patient contacts through home visits, school programs, giving treatment or educational services in clinics, and through other activities. While their patient contacts were extensive, the process of team was a profound aspect of the group's effort. Before January, the team had worked enthusiastically in establishing individual and group goals. They had prepared an interdisciplinary patient evaluation form and expected that each member would be able to evaluate patients in the home and make referrals to other team members.

The home health agency nurses politely and subtly discouraged this activity. They pointed out that it would mean too many people going on home visits, that the clients would resent so many questions, and so forth. The students became discouraged and tried other ways to achieve their goals. The nursing

Home visits are part of the clinical team's exposure to the real world where they will later practice

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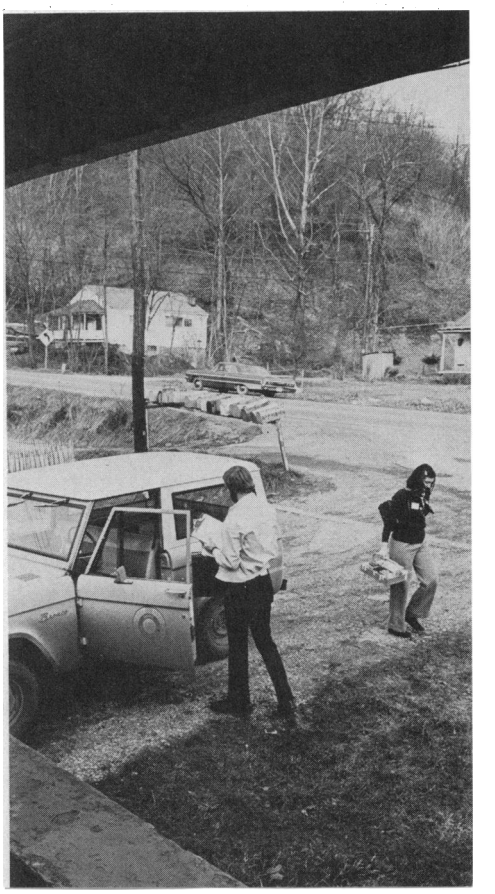

and physical therapy students decided to get as much of the evaluation information as possible during conversations on home visits when they treated patients.

The community health student had planned an individual project—to determine what influences a person's decision to seek or reject family planning. She wanted to interview opinion setters in the community. Several health planners discouraged this approach; they felt that peer influence was much more significant in such decisions than the influence of leading citizens. The student then decided to investigate a possible correlation between prenatal care and length of hospital stay. In interviews with the hospital staff, especially the nurse-midwife, she learned that the hospital will not accept women for deliveries if they had not received prenatal care.

The student finally interviewed 40 women attending public health family planning clinics concerning their attitudes towards the clinic's services compared with the services or private physicians. Throughout the field experience she assisted with family planning through the Kentucky Medical Assistance Program clinics and the Women and Infants Clinic and made home visits with other students.

The dental hygiene student had anticipated evaluating the dental needs of family members in the homes she visited. At first, she was discouraged from doing this, so she turned to dental screening at two Kentucky Medical Assistance Program clinics and to teaching dental hygiene to third graders in the public schools. The schools were closed after heavy snowstorms, and she was able to conduct only two teaching sessions.

She did manage to make a few home dental assessments and consulted with dentists regarding the costs of restoration. Although she appeared to have adjusted and she functioned appropriately, she stated that she was unhappy with her role and did not belong on a clinical team.

The medical technology student also stated that her discipline did not belong on a clinical team. She originally planned to do parasite screening while making home visits. This idea was discouraged by her resource person on the grounds that parasites are seldom found by public health workers.

A proposal that she test for iron deficiency anemia did not appeal to her and she did not receive adquate support to start this project. The suggestion that she do hematocrit counts, urine testing, and so forth at a small local outreach clinic could not be carried out because another team was there making field observations. She continued to make home visits with the nursing and physical therapy students and took appropriate blood samples when they were ordered, but she was very dissatisfied with this role.

Evaluation. It might be concluded from these reactions that role attitudes of the various disciplines are so deeply ingrained in students during their professional schooling that the transition to a less structured environment is extremely difficult. The team learned that while groups may have good social rapport, the social facades are ripped away when members confront a group challenge, and the results can be traumatic for the individual.

The team also found that, while they had achieved a much greater number of patient contacts than other clinical teams, the members had more interpersonal problems because of individual differences and inability to cope with the stresses of changing and unsettled environments. They were pleased to find that the agency personnel who were initially hesitant about the students' abilities in working with patients gradually allowed the students to assume greater responsibility as they got to know the young people.

Conclusions

Kentucky January presents the student with a unique set of problems, both educational and personal. Being removed from the structured, directed environment of the academic health science center and placed in a completely opposite situation in the community forces the student into a direct confrontation with his skills and aptitudes in dealing with patients. The loss of the security of constant faculty supervision is initially a traumatic event for most of our students. Compounding this loss is the student's first basic experience of sharing his or her perceived role with others.

Students also find themselves in a position of sharing their lives as well as their professions with a new group of persons, not often of their own choosing. The need to adapt their existence to this new personal environment has proven difficult for many students.

We have found that the Kentucky January experience, while difficult to evaluate directly in a qualitative manner, leaves an indelible mark on the student's attitude towards patients and their own professions. The shock of "real world" activities gives the student a jump into the patient care arena that others often do not get. They also achieve an exposure to the total scope of health care delivery and the team approach that enhances their broad knowledge of health. We are pleased that approximately 25 of the Kentucky January students, from both observational and clinical teams, have chosen to return to their team's sites for employment.

The Kentucky January experience is trauma for many students, but it is proving invaluable in terms of their future functioning in delivering care.

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