Primary Health Care for Hispanic Children of Migrant Farm Workers

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ABSTRACT

Providing primary care to children of culturally diverse populations is a challenge for pediatric nurse practitioners and educators. The challenge is intensified when providing care to Hispanic children who are uprooted because their parent(s) are migrant farm workers. The creation of health-focused academic community partnerships is one unique strategy to improve primary care to these children. One such partnership is the ongoing Migrant Family Health Program in which practitioner nursing students and their faculty members provide primary health care to children who are enrolled in a summer education program for migrant children.
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Providing care to children of culturally diverse populations is a challenge to pediatric nurse practitioners in both urban and rural settings. Children of Hispanic migrant farm workers constitute a population at high risk for many health problems. These "uprooted" children of migrant families have numerous problems not seen in the general population. Contributing to these problems is minimal or no access to health care, poor living conditions, fragmented education, and discrimination. The frequent migration to new camps coupled with crowded unsanitary living conditions make migrant children vulnerable to many potential infections (viral, bacterial, and fungal) and an increased incidence of disease spread (Gwyther & Jenkins, 1998). Also, studies indicate that migrant farm workers and their families have increased frequency of dental disease, mental health problems, substance abuse, malnutrition, diabetes and hypertension, tuberculosis, anemia, and parasitic infections (Bechtel, 1995; Ciesielski, Esposito, Protiva, & Piehl, 1994; Ciesielski, Seed, Estrada, & Wrenn, 1993; Ciesielski, Seed, Ortiz, & Metts, 1992; Gwyther & Jenkins, 1998; Jones & Schenk, 1996; Rust, 1990).

Children make up almost one fourth of all farm labor in the United States, placing them at risk for injury from farm operations or even death from farm machinery accidents (Migrant Clinician's Network, 1990). In addition, they are at risk for pesticide exposure in the fields, at play, and at home (Pollack, Landrigan, & Mallino, 1990).

The health status of these children is further threatened because of barriers to health care such as family mobility, financial constraints, and cultural barriers. The mobility of the families impedes adequate follow-up and referral for health problems for the children. Financial constraints stemming from

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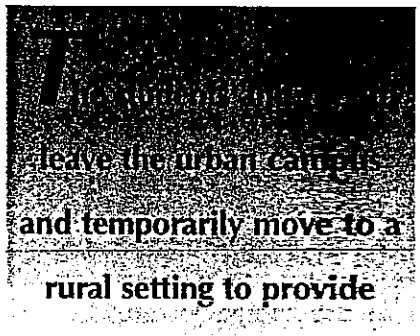
being in a low-wage work group, being paid according to how much is harvested, and lack of health insurance hinder migrant farm workers from seeking health care for their children. Language is a major cultural barrier for migrant workers who speak little English and for health care providers who do not speak Spanish. Nursing interventions to improve health status and access to care such as the use of lay community outreach workers, comprehensive health programs for migrant summer school students, the use of mobile vans in migrant camps, and information tracking systems are recommended (Gwyther & Jenkins, 1998).

The creation of health-focused academic community partnerships is another unique strategy to improve primary care to Hispanic children of migrant farm workers. These partnerships enable faculty members to respond to contemporary social and health issues, enhance student learning experiences, and provide a setting for faculty practice and research (Gaines, Kelley, & Spencer, 1997). One such partnership is the Migrant Family Health Program created by faculty and administrators in the School of Nursing, College of Health and Human Sciences at Georgia State University. The college strives to have authentic partnerships with citizens and agencies that will have long-term impact within the following parameters:

- The mission of working with, rather than for, communities will enrich the education we offer students as they learn from faculty, practitioners, and citizens;
- Our research will lead to meaningful differences if we plan and conduct it in collaboration with community citizens and agencies;
- Although academicians and nonacademicians have different agendas, our agendas are not oppositional but complementary; and
- Academicians and nonacademicians can learn from each other, building on our shared and diverse assets (Gaines et al., 1997)

PROGRAM DEVELOPMENT

For the past 6 years (1994-1999), faculty members from Georgia State University (GSU) School of Nursing have provided a 2-week summer immersion learning experience for nursing students in the southern part of the state. The students and faculty leave the urban campus and temporarily move to a rural setting to provide health care to Hispanic migrant farm workers and their families. The project, known as the Migrant Family Health Program, began as an innovative teaching and learning opportunity for undergraduate student nurses in a community health course. The course was integrated into the *Kellogg Community Partnerships in Education Initiative* awarded to the school. The success of the first summer course was attributed in part to students' reports of their experiences. Entries in students' daily journals revealed that their exposure to the Hispanic culture and the needs of migrant farm workers had changed their perspectives of the population. Also, positive evaluations from community members and migrant farm workers themselves contributed to the success of the course. Therefore, a decision to continue and expand the student learning experience was made by faculty members and administrators of the School of Nursing because the program was congruent with the goals of the newly established community-focused curriculum.



The program was extended to include both undergraduate nursing students and graduate nurse practitioner students. Also, in 1998, GSU psychology students began providing counseling services to migrant families. The expansion included pursuing the development of a formal partnership between the School of Nursing and community members of counties with large numbers of Hispanic migrant farm workers in Georgia. Letters were sent to all the rural district health officers in the state expressing the School's desire to offer a summer service learning experience designed to provide primary health care to migrant farm workers and their families. Initially members of two counties, both in rural areas of South Georgia, responded to the school's offer to assist in providing primary care to their migrant population. The collaboration contributed to the establishment of the Migrant Family Health Program designed to provide health care for an underserved, culturally diverse population. Central to the success of the program has been the cross-sector collaboration from the county health departments, the county migrant education programs, the county migrant health programs, Southwest Georgia Area Health Education Program (SOWEGA-AHEC), Hispanic outreach workers, local physicians, local hospitals, Chambers of Commerce, and farmers who employed the migrant workers. Several meetings were held with representatives of the interested agencies throughout the year for the purpose of planning the upcoming health care program, which included an evaluation of previous experiences. The outcomes of the meetings included targeting appropriate needed services and needed supplies, such as medications and equipment. In addition, each community partner committed to contributing different resources.

Some of the agencies making commitments were the Colquitt County Migrant Health Program, SOWEGA-AHEC, the Colquitt County Migrant Education Program, and the Colquitt County Extension Service. The Colquitt County Migrant Health Program provided patient health records, health assessment forms for documentation, some medications, and served as the referral source for patients needing follow up treatment from the project. In addition, their physicians provide the support for the protocols used in the program by faculty members and students. The SOWEGA-AHEC served as a liaison with local community members to obtain permission to provide services in trailer parks, packing sheds, and farms, and also obtained donations of medications, monies for health supplies, and meals for faculty members

and students. The Colquitt County Migrant Education Program provided access to the children seen in the program by obtaining consents for the health assessment and treatment. They also provided space in the school to conduct the child health examinations. The school outreach worker from the Colquitt County Migrant Education Program agreed to take students on home visits to follow up on identified health and educational needs. In addition, the Colquitt County Extension Service provided educational materials and interpreters.

The Migrant Family Health Program is a unique clinical setting in which undergraduate community health students were able to obtain clinical experiences that met the requirements of their undergraduate community health nursing didactic course. The clinical course objectives were focused on care rendered to populations rather than individual clients and can be found listed in Box 1.

Specific activities were designed to facilitate the achievement of the clinical course objectives. These activities are presented in Box 2.

During subsequent years, the program was expanded to include pediatric and family nurse practitioner students from Georgia State University and other universities in South Georgia. The program affords pediatric and family nurse practitioner students the opportunity to meet both course- and career-related objectives.

The nurse practitioner students were able to demonstrate expertise and leadership through collaboration with community agencies and other health professionals. Through this collaboration, the students were able to engage in comprehensive child, family, and community assessment and established goals with relevant interventions designed to optimize the child's and family health status. Furthermore, the opportunity to spend time with children and their families within their natural environment at home and school provided the students insight into the family, cultural, and environmental factors that shape the child's health domain. The application of theoretic formulation and relevant research findings within this defined cultural context guided students' future orientation and approach with similar population groups. Finally, the students had the opportunity to apply history and physical assessment skills, diagnostic and management skills, and consultation referral skills.

BOX 1 Undergraduate Community Health Clinical Course

After successful completion of the Community Health Clinical Course objectives, the student should be able to:

1. Discuss the critical elements that influence the health status of selected communities;
2. Demonstrate knowledge of health planning by identifying solutions, plans, and evaluation methods for selected community health problems;
3. Recognize the value of research in nursing and related fields in the provision of nursing care to communities; and
4. Integrate knowledge of self, sciences, humanities, and the core courses within the framework of the nursing process with the goal of assisting communities in the promotion, maintenance, and restoration of optimal patterns of health.

BOX 2 Activities designed to achieve the clinical course objectives

Some of the activities designed to achieve the clinical course objectives included the following:

1. Conducting a community health nursing assessment comprised of a windshield survey, census tract, and health statistics (at the district, state, and national level) and interviews with local residents;
2. Addressing health issues of the migrant farm worker community utilizing student facilitated seminars;
3. Conducting a family conference and developing a family care plan;
4. Completing a group community assessment and analysis paper; and
5. Providing primary health care to migrant farm workers and their family members in the school, fields, and in the trailer camp communities where the workers and their families lived

The program now has a stronger focus on the health needs of migrant children because of the collaborative relationship with the local school system. Students and faculty members obtained access and provided primary care services to the children of migrant farm workers who were enrolled in the Migrant Education Program. The Migrant Education Program is a federally funded summer session designed by the Georgia Department of Education aimed at enhancing the education of children who are members of migrant farm families. In addition to the stronger child-health focus of the program, students and faculty members continued to provide health services in the County Migrant Health Programs, County Health Departments, fields where the migrant farm workers are employed, and in the migrant trailer camp communities. The majority of primary care provided to children occurred in the elementary schools with Migrant Education Programs. Under a collaborative agreement with the migrant health program, faculty members and students treated most of the identified problems and made referrals to the county migrant health program for needed follow-up treatment.

In the elementary schools, the gymnasiums (often without air conditioning) were transformed into a health clinic with individual examining areas and larger screening areas. Finding sufficient tables and chairs to set up the examination areas was a challenge. Local churches and the County Migrant Health Program supplied most of the needed tables and chairs. Large sheets supported by lines strung from basketball goals, as well as folding screens, were used to provide privacy. The intake and screening areas were located toward the front of the gymnasium. Screening areas were identified with appropriate signs and equipment. All screening was accomplished in

the gymnasium except for hearing screening, which was conducted in a separate room in the school to ensure the necessary quiet environment.

The flow of traffic is important in any health setting to provide the most efficient care. The children were brought to the gymnasium one class at a time. Each child was assigned to a screening area and then, after rotating through all the screening areas, was escorted to a practitioner student for a complete physical examination.

When the examination was complete, each child received a "goody" bag intended to encourage healthy behaviors. The bag contained a toothbrush, toothpaste, shampoo, soap, wash cloth, and an age-appropriate toy. The children looked with curiosity into their bags and were delighted with the contents. They demonstrated their appreciation with such phrases as "thank you," "muchas gracias," and "Are these for me?" The bags also served as an incentive for other school children waiting for their "health checks." Most of the items in the bags were donated to the program by local businesses in the county and by metro Atlanta area businesses. In addition, students, faculty members, and other community members contributed articles.

Students had the unique opportunity of visiting in the homes of children who required follow-up care. The Hispanic outreach worker gave instructions in Spanish to the parents of children diagnosed with conditions such as anemia, otitis media, and urinary tract infection. The non–Spanish-speaking nursing students were able to provide health education using the outreach worker as an interpreter. When parents raised questions too technical for the lay outreach worker, the students were an asset to the lay outreach worker by providing accurate health information.

STATISTICS

In 1994 and 1995, 1140 episodes of care were provided to migrant farm workers and their families at the established health clinics. Five hundred eighteen episodes were child health assessments of those attending the Migrant Education Program. The child health assessment included a physical examination, height and weight measurements, hearing and vision screening, urine screening, and a hemoglobin check. In addition, identified problems were treated and appropriate referrals were made. The other 622 episodes of care during 1994 and 1995 were rendered to adults at diverse sites, including trailer parks and farms employing migrant farm workers.

In 1996, because of a variability of crop harvest patterns and the Centennial Olympic Games held in Atlanta, the focus of the program changed to child health only. That summer, 233 children were seen for physical examinations and health screenings. In addition, faculty researchers conducted focus groups among migrant farm workers to examine their perceptions of health and health issues. The voices of migrant farm workers were heard, and the results of the study were used for program development and health interventions. The themes identified by the migrant farm workers were health care issues, living and working conditions, and social and community issues (Perilla, Wilson, Wold, & Spencer, 1998). Some secondary themes identified were incorporated into the program, such as the need for services to be rendered in the evenings and at work sites, the need for educational materials in Spanish, and the need for counseling services for migrant farm workers.

The top 5 problems seen consistently among the children were dental caries, upper respiratory infections (otitis media, otitis externa, sinusitis, pharyngitis, allergic rhinitis), urinary tract infections, anemia, and dermatitis.

In 1997, 391 episodes of care were provided to children attending the Migrant Education Program and those seen in the migrant camps. In the focus groups conducted in 1996, the migrant farm workers identified their lack of dental services and dental information. Therefore, in addition to child health assessments in the schools, a formal educational module related to dental health was developed and implemented by graduate practitioner students under the guidance of faculty members. Additional educational modules were developed about common children's illnesses, common adult illnesses, and pesticide poisoning and prevention. These modules were targeted for migrant workers at the campsites and were based on information elicited from the farm workers in the focus groups.

The ages of the children seen in 1997 ranged from 4 weeks to 21 years. Data from the previous 2 years were consistent with the data obtained in 1997. The data were entered into an EPI-INFO software package to form a database for 1995, 1996, and 1997. The top 5 problems seen consistently among the children were dental caries, upper respiratory infections (otitis media, otitis externa, sinusitis, pharyngitis, allergic rhinitis), urinary tract infections, anemia, and dermatitis. The Colquitt County Migrant Health Program used this data as part of their statistics to assist in maintaining their funding sources, as well as obtaining new funding.

For the first time in south Georgia, the voices of Hispanic children whose parent(s) are migrant farm workers were heard in a research study using a focus group methodology. After obtaining consent from the parents and assent from the children, 14 focus groups were held to elicit migrant children's perceptions of health and what it means to be healthy. The result of this research provided a better understanding of Hispanic migrant children's perceptions of health and helped in planning future educational modules for children (Wilson, Pittman, & Wold, in press).

In 1998, 365 children of migrant farm workers attending the Migrant Education Program were examined. When providing health care, the five most frequently made diagnoses were vision problems, dental caries, pharyngitis, anemia, and dermatitis, which were diagnoses seen in previous years. That was the first year that referrals for vision

TABLE 1 Numbers of children younger than age 21 years seen from 1994 to 1999

Year	No. of children seen
1994 and 1995	518
1996	233
1997	391
1998	345
1999	544
Total	2031

TABLE 2 Most frequent diagnoses from 1997 to 1999

1997	1998	1999
Dental caries	Vision problems	Dental caries
Upper respiratory infections	Dental caries	Vision problems
Urinary tract infections	Pharyngitis	Anemia
Anemia	Anemia	Otitis

problems were more frequent among the children than referrals for dental caries. In addition to providing primary health care, health promotion educational modules were again presented to the children.

Pediatric nurse practitioner students presented health classes to migrant children in pre-kindergarten to 9th grade related to basic hygiene. smoking risks, dental care, nutrition. and knowing how the body works. The teaching experience was a challenge for the student pediatric nurse practitioners because they had to present information to children at different developmental ages on the same day. Teaching strategies included lecture, discussion, videos, poster presentations, handout materials, and games. The teachers in the Migrant Education Program requested more classes for children in 5th to 9th grades in the summer of 1999 on topics of career choices, substance abuse, and cardiac pulmonary resuscitation.

In 1999, health care was provided to a total of 544 children attending the Migrant Education Program and those seen in the community. Since 1994, faculty members and students have rendered over 2000 episodes of care to migrant children. The total numbers of children seen at the Migrant Family Health Program from 1994-1999 are shown in Table 1.

The most frequent diagnoses in 1999 were dental caries, vision problems, anemia, otitis (externa and media), insect bites, dehydration, and muscle pain-strain, which were diagnoses seen in previous years. Table 2 shows the top four diagnoses made for the years 1997-1999. The lack of access to dental services by these children explains why dental caries is one of the ongoing most frequent diagnoses made each year. In addition, vision referrals are made each year, and yet only a small number of children get treatment because of the limited access to eye care services for this population of children.

Undergraduate nursing students presented health classes related to substance abuse, health careers, and cardiopulmonary resuscitation to students in the 5th to 9th grades. The inclusion of these classes was based on suggestions from the teachers participating in the Migrant Education Program in 1998. In addition, the nurse practitioner students provided individualized teaching as part of the comprehensive physical examinations administered to the children in the schools. Implications for educational services continue to be preventative in nature, such as dental hygiene, nutrition (foods with iron), and prevention of infection from insect bites.

The teachers and staff of the Migrant Education Program annually host an open house and dinner for all students and their parents. The school-sponsored event provided a service to parents and a learning experience for participants in the Migrant Family Health Program. The event enabled parents to meet teachers and see firsthand their children's work. Also, the interactions between the children and their family members further enhanced student nurses and faculty members' understanding of migrant farm working families.

MIGRANT FAMILY HEALTH PROGRAM EVALUATION

Written evaluation forms were distributed to all stakeholders (including teachers) participating in the Colquitt County Migrant Education Program, nurses and staff members from the County Migrant Health Program, students and faculty from Atlanta participating the Migrant Family Health Program, staff members from SOWEGA-AHEC, migrant farm workers receiving care, and parents of children receiving care. Overall, there was consensus among the stakeholders that the Migrant Family Health Program made a significant contribution to access of primary care among migrant farm workers and their families. The information gathered from the evaluation process was shared at a meeting with representatives from all agencies. The information helped local county health workers identify health issues and plan health promotion activities to avoid further illness and unnecessary use of emergency room visits. Local health care providers also obtained data that were incorporated in proposals requesting needed resources for additional services for migrant farm workers. An increased awareness of migrant farm worker needs allowed community members to better participate in solving problems.

Teachers in the Migrant Education Program reported both verbally and in writing that the health services rendered to the children in the Migrant Family Health Program were positively received. The faculty and nursing students' interactions with the children enabled the teachers to reinforce health education in the classroom. In addition, the teachers commented about their own increased awareness of the needs of this culturally diverse population, which was incorporated into their teaching strategies.

Many of the student nurses reported that their lives had been changed by the experience of spending concentrated time with migrant farm workers and their families. The students were impressed with characteristics of the migrant families with whom they interacted, such as close family bonds, positive work ethic, and sincere appreciation for the care being rendered. They described their participation in the program as increasing their level of awareness of the health needs of this population. In ad-

dition, they reported increasing their physical assessment skills and their understanding of culture-centered nursing. They became acutely aware of the lack of urban resources they were accustomed to using and discovered firsthand how a lack of basic primary care adversely affects people's health.

The responses from the faculty included those who participated for the first time and veterans of the Migrant Family Health Program. There was much enthusiasm from the faculty and a consensus among the respondents that the program was of mutual benefit to all involved. In addition to providing health assessments and improving the quality of health care, the faculty members identified the program as a unique opportunity to demonstrate the concept of "caring" to students. The faculty members also identified the need for future activities such as continued follow-up care throughout the year, the administration of the Hispanic version of the Denver II Developmental Screening Instrument, mental health assessments, and the need for counseling services.

It is hard to quantify the excitement, challenges, and wonderful interactions that took place between children, students, and faculty during the Migrant Family Health Program. Living in the same community as the migrant farm workers for a period of time made an indelible imprint on both students and faculty members. This immersion experience created learning opportunities that were different from the classroom and short-term interactions in hospitals and other health agencies in an urban setting. The following case study is an example of some of the cultural issues pertinent to pediatric nurse practitioners.

CASE STUDY

Two Hispanic boys, 10 and 12 years of age, lived and worked with their uncle as migrant farm workers. The family came to the United States from the mountains of Guatemala. Both boys were engaged in tobacco harvesting when they were seen during the Migrant Family Health Program. The 10-year-old (who said he was 16) was affected with albinism.

Students and faculty at the migrant health camp were obtaining health histories from a number of Hispanic individuals when the two boys and their uncle returned to the camp after a day in the fields. Students noticed that both boys went into their trailer quickly while the uncle came to the clinic to have his tuberculosis skin test read. The 10-year-old boy stood at the front door of his trailer, obviously wanting some attention but too shy to come forward. He watched for a while from a distance before a student was sent to encourage him to be seen. As the student drew closer to the boy, it became apparent that the child was suffering from sun poisoning. He had blisters on his lips, nose, fingers, and forearms. Faculty members used an interpreter to inform the boys and their uncle about the need for the 10-year-old boy to be protected from the sun while working in the fields and how to treat his existing problems. The students equipped the albino child with a long-sleeved shirt, sunscreen lotion, and a hat for use in the fields. Another unfortunate twist to this story and a complicating problem for these boys was the fact that their uncle had tested positive for tuberculosis and no health care was available for him as he moved up the "migrant stream."

The students were impressed with characteristics of the migrant families with whom they interacted, such as close family bonds, positive work ethic, and sincere appreciation for the care being rendered.

In speaking with these boys, the student nurses and faculty members learned about their motivation to come to the United States and work in the fields even though they risked deportation because of their young ages. The boys revealed that both of their fathers were deceased and they were in the country to work to support their families in Guatemala. They expressed great happiness in their ability to send $200 home to their mother. Both boys were vulnerable because they were dependent on their work crew leader for transportation, were not in control of their work hours, and were expected to move to other states with little notice. They were told that they would be picking oranges in Florida the following week.

Barriers to health care were identified in the preceding case study. Children working in the fields are frequently unaware of health problems until their condition becomes so severe that it prevents them from working. Their caretakers may not leave the workplace to seek health care for the children, and employers may be unaware of health problems until work performance is impeded.

Another major barrier was language. Even health care providers with some Spanish-speaking skills are unsure how well they are communicating with non–English-speaking clients. Interpreters, although valuable, pose another problem. Health care providers with minimal Spanish-speaking skills can neither validate the accuracy of the information relayed to the client through their interpreters nor determine how well the information is received and understood by the client (Padgett & Barrus, 1992).

Lack of follow-up treatment for identified health problems was another obvious barrier. The mobility and illegal immigrant status of these clients precluded tracking health-related issues. Furthermore, these clients' reluctance to express their need for seeking health care is fortified by minimal English-speaking skills, expressed fear of losing their jobs, and fear of deportation. In addition, their lack of control over their work schedule and location inhibits their ability to easily schedule follow-up treatment.

SUMMARY

For the past 6 years (1994–1999), faculty members and nursing students participating in the Migrant Family Health Program made primary care available to Hispanic children of migrant farm workers in a community which otherwise would have limited access to primary care. A referral mechanism was developed to provide follow-up care.

Dental caries, anemia, and diseases reported in the literature to be increased in migrant families were diagnosed in this population of children. Nursing students and faculty members witnessed firsthand the poor living conditions, limited access to health care, and fragmented education that plague Hispanic migrant children. Students acquired a newfound level of empathy and personally felt some of the frustration experienced by the migrant families in trying to obtain basic services.

The stakeholders in the Migrant Family Health Program shared a mutual belief that the program was making a significant difference in the health care of children of migrant farm workers in South Georgia and the program can serve as a model for other health care providers. The creation of a health-focused academic community partnership enabled faculty members and practitioner students to effectively respond to contemporary social issues. The partnership enhanced student learning experiences and provided a setting for faculty practice and research. This successful partnership with citizens and agencies made essential primary care available for migrant families. The Migrant Family Health Program, from all indications, has had a positive impact on this underserved population.

The inclusion of nurse practitioner students in the Migrant Family Health Program benefitted both clients and student learning. The quality of health care received by migrant children was enhanced by the use of pediatric nurse practitioner students; the students gained physical assessment and diagnostic skills and valuable teaching experience. The student clinical learning experience obtained in the Migrant Family Health Program cultivated cultural sensitivity and made lasting impressions that were truly career relevant for future practice as pediatric nurse practitioners.

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Pediatric Pearl

Good resource for parents

To encourage parents to become more involved in the care of their child, our office purchases copies of Barton Schmitt's *Your Child's Health* at a bulk rate and then sells them to parents at a reduced price.

Nancy Barber Starr, MS, CPNP
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