AN ASSESSMENT OF THE CURRENT AND FUTURE HEALTH CARE NEEDS AND SERVICES FOR A SMALL RURAL INDIANA VILLAGE

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Growing up in a small rural village, one often becomes familiar with the affairs of one's friends and neighbors quite easily. This is mainly due to the small size and the increased dependency on the same individuals in order to fulfill one's day-to-day business of living. There is a decreased variety of persons providing any given service in comparison to the number of choices one might have in a larger community. This greater dependency leads to a closer bond between the members of the community.

Having grown up in such a village, I came to know many of the health care needs of the people with whom I shared the community. However, it was not until I began working toward becoming a health care professional, a registered nurse, that I fully realized the value of adequate comprehensive health care, both preventive and curative, for all individuals. This health care has a direct bearing on the maintenance of high-level wellness among people, high-level wellness being "a state of health that promotes functioning at the best level in relation to the individual's capabilities."¹

From personal experience, I knew health care was a major concern of various individuals within the village. However, I was not aware of any community-wide effort at investigating the health care needs of the populace and what services might meet these needs. My project was hopefully a step in this direction. The purpose of my project was to survey the families residing in the small rural village, Gosport, Indiana, for an indication of the current and future health care services needed by the community. I constructed a survey sheet (see Appendix) for collecting the opinions of the adult population regarding what they believe to be their needs for health care services and what services they feel are already available to them.

My intentions were to support the following hypotheses:

1) Community members feel adequate health care facilities are not available to all members-at-large, and

2) Existing health care services are not utilized or are considered unavailable by a large segment of the given population because of:
   a. expense
   b. time involved
   c. lack of transportation, and/or
   d. unawareness of need.

I was also interested as to what the community saw as the solution to the health care problems they felt existed.

METHOD

In order to conduct the survey in as objective a manner as possible, I visited every fourth house in the village of approximately 700 people. This was to insure a random sample of given population.
At each home, I explained I was a nursing student from the community who was interested in their opinion as to the health care services available to them at present, their satisfaction with the service and what services they would like to see provided. I showed the survey sheet to an adult member of the home and explained the information would be strictly confidential. I did not ask for their name, I asked them to fold the survey sheet when they had completed it and explained I would not look at them until I had collected the entire sample. I hoped this step would encourage participation in the survey by helping insure the participants' feeling of privacy.

RESULTS

I visited 22 homes in the community. If I received no answer upon my first visit after three consecutive knocks on the door, I returned a second time on a later date. Seven of the homes produced no response upon each visit. Two households refused to participate. One household stated they were satisfied with their care and closed the door. Seven households completed the survey sheets. The remaining five households stated "really don't know what to tell you." They would not fill out the form but continued to discuss the topics explored by the survey sheet.

Out of the twelve actual responses obtained, 58% had their own family physician within a 30 mile radius of the community but not closer than 8-10 miles. Six of the seven had their own transportation and one was transported by a relative. Three visited their physician regularly for checkups. Three
visited only when ill. One did not respond to this question. See Table I for the number of households and the percentage of the sample that utilized the other various health care personnel mentioned in the survey.

<table>
<thead>
<tr>
<th>Health Care Personnel</th>
<th>Number of Households</th>
<th>Percentage of Sample</th>
</tr>
</thead>
<tbody>
<tr>
<td>Family Physician</td>
<td>7</td>
<td>58</td>
</tr>
<tr>
<td>Clinic</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>Chiropractor</td>
<td>2</td>
<td>17</td>
</tr>
<tr>
<td>Psychiatrist</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>Podiatrist</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>Gynecologist</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>Nurse Practitioner</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>Dentist</td>
<td>5</td>
<td>42</td>
</tr>
<tr>
<td>Optometrist</td>
<td>2</td>
<td>17</td>
</tr>
<tr>
<td>School Nurse</td>
<td>1</td>
<td>8</td>
</tr>
<tr>
<td>Speech Therapist</td>
<td>---</td>
<td>---</td>
</tr>
</tbody>
</table>

Table II shows the age distribution represented in the survey. The largest age interval represented were those 60 years or older. The remaining groups listed according to the largest to the smallest were as follows: the young and middle aged adults (21-59 years of age), the children (1-12 years of age), and the adolescents (13-20 years of age).

<table>
<thead>
<tr>
<th>Age Interval</th>
<th>No. of Individuals</th>
</tr>
</thead>
<tbody>
<tr>
<td>under 1 year</td>
<td></td>
</tr>
<tr>
<td>1-15</td>
<td>1</td>
</tr>
<tr>
<td>6-12</td>
<td>2</td>
</tr>
<tr>
<td>13-20</td>
<td>3</td>
</tr>
<tr>
<td>21-40</td>
<td></td>
</tr>
<tr>
<td>41-59</td>
<td></td>
</tr>
<tr>
<td>60-65</td>
<td>1</td>
</tr>
<tr>
<td>66-75</td>
<td></td>
</tr>
<tr>
<td>76-85+</td>
<td></td>
</tr>
<tr>
<td></td>
<td>1</td>
</tr>
</tbody>
</table>
The section of the survey sheet dealing with the family health history produced the results seen in Figure I. The health problems having the highest incidence or frequency in the families surveyed were cancer, hypertension, myocardial infarction, and visual impairment.

![Bar Diagram]

**HEALTH PROBLEM**

**FIGURE I.** BAR DIAGRAM SHOWING THE FREQUENCY (EXPRESSED IN %) OF HEALTH CARE PROBLEMS IN A CHOSEN SAMPLE.

The rest of the survey showed that 50% of the sample had used the hospital in the past 3 years. The greatest percentage were hospitalized for diagnostic purposes. The remainder had used the hospital for surgery or pregnancy. 33.3% of the sample had reached the hospital with their own transportation. 16.6% had needed ambulance service. The remainder of the sample did not indicate a history of hospitalization.

Forty-two percent of the sample expressed satisfaction with the health care services they received. 8.3% were dissatisfied with at least one segment of health care (e.g. cancer therapy). The remainder did not respond to this section.
Fifty percent of the sample population wished to see a physician in the community. The other suggestions made were as follows: a clinic (8.3%), a cancer clinic (8.3%), and supervised recreation for the children (8.3%). The rest of the sample did not know of any solution for increasing health care or did not see a need.

The greatest percentage of the households surveyed felt the elderly were the major health need in the community (16.6%). The other health needs expressed by the sample were cancer, well-baby clinic, Planned Parenthood, and drug addiction. Each of these represented 8.3% of the population.

Those who responded as to what facilities they would like to see furnished in the community felt that the financial resource for the facilities sought should come from the government. Those who wished to have a physician in the community did not suggest any financial resource.

**IMPLICATIONS OF SURVEY RESULTS**

Consider the two hypotheses from which this project began. The first hypothesis stated community members feel adequate health care facilities are not available to all members-at-large. Only 42% of the sample were satisfied with their health care. 8.3% expressed dissatisfaction. In addition, 50% wished to see a physician in the community while another 17% (approximate) suggested a clinic. 50% of the sample also named a major community health need they felt was not being met. Though some of these statistics would not support the hypothesis alone, in combination, they suggest that adequate (if one defines adequate
as meeting the needs of the populace) health care facilities are not considered available to all members-at-large.

The second hypothesis stated existing health care services are not utilized or are considered unavailable by a large segment of the given population because of expense, time involved, lack of transportation, and/or unawareness of need. Unfortunately, the survey sheet and the responses collected did not provide enough information to make an adequate assessment on this point.

Another implication which can be drawn from the data gathered is the type of health problems most often experienced by the community members. The largest segment of the sample was the group over 60 years of age. One can predict from this that a great many of the health needs will revolve around maintenance of a stable chronic disease state. Rehabilitation and psychosocial support in changing life patterns would also be important. The next age group, 21-59 years of age, would benefit from preventive medicine. Health promotion through education and continued surveillance for early detection of illness would be the emphasis. The children, ages 1-12, would also benefit from preventive measures as mentioned for the last group. However, there should be a greater emphasis placed on normal growth and development. The adolescents also fit under the same need categories as the last two groups. The stress here might be on sexual maturing and psychosocial development.

Chronic disease states (See Figure I) were definitely reported frequently in the family health histories.
Now that a base of the community's health care needs has been established, what might be the course of action? The community has attempted to acquire a physician but to no avail. As a result of my research, I would like to propose an investigation into the acquisition of a family nurse practitioner. This is a new concept to many. However, in my estimation, the family nurse practitioner (FNP) would be a practical means of enhancing the community's health care.

What services could the FNP provide? By defining his or her role more explicitly, it becomes clear how this type of practitioner could meet the community's needs. Eight role components of the family nurse practitioner have been described. They are assessor, consultant, supervisor, teacher, coordinator, ministrator, counselor, and collaborator. However, a more specific, clearly understandable explanation of the FNP's function is necessary. The family nurse practitioner has been described in the following manner:

... a generalist who combines the basic skills of the pediatric and medical nurse practitioner with the orientation and approach of the public health nurse in order to provide a high level of health care to people of all ages. As a primary care provider in ambulatory settings, she assesses the physical, emotional, and developmental status of individuals and families; analyzes health behavior related to personality, life style, and culture; makes positive interventions to maintain, restore, or improve health; and, critically evaluates the quality and effectiveness of her practice.

By adding medical skills in diagnosis and patient management to her nursing knowledge and

skills, she is able to expand her care to include all levels of prevention, that is, health promotion, specific disease protection, early recognition and prompt treatment, and disability limitation and rehabilitation. Teaching, counseling, and provision of emotional support are important aspects of the practice: she promotes independent positive health behaviors in patients.

The family nurse practitioner is acutely aware of the interrelatedness of community, family, and individual health and approaches her patients using this framework. She is aware of community needs and resources and collaborates with health and social agencies to meet important community, family, and individual needs.

The family nurse practitioner is able to provide care independently to many patients and works closely with physicians in the joint management of others. She is acutely aware of the limitations of her knowledge and skills, continually seeks to improve her practice, and her primary concern is the health of her patients and the quality of their care.

This is a broad concept of the FNP's function. An examination of the role in a more specific sense will give a clearer picture of what the duties actually are. Consider this explanation of the University of California's (Davis) family nurse practitioner curriculum:

... in the area of pediatrics she will assume responsibility for the care of well children, including evaluating their physical and psychosocial development, initiating immunizations, and giving support and counsel to their mother on growth and development and dietary schedules. She will recognize physical abnormalities and deviations from normal and refer children with these conditions to the physician. She will treat uncomplicated illnesses such as upper respiratory infection, otitis media, skin eruptions, and common infectious diseases of childhood, and will differentiate between uncomplicated illnesses and those which require the physician's expertise.

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In maternity care, she will assume responsibility for the care of women with uncomplicated pregnancies. After an initial examination by the physician, the family nurse practitioner will assume responsibility for antepartum care, determining fetal size and position, fetal heart sounds, maternal weight gain, and blood pressure, and will order urinalyses and other laboratory tests, as indicated. She will provide anticipatory guidance and will recognize those conditions requiring consultation with, or referral to, the physician.

Family planning activities will be another major responsibility of the family nurse practitioner. By working with a couple, in consultation with the physician, she will determine the contraceptive method best suited to their needs and performance. She will do a complete physical examination including Pap smear, where appropriate, prepare the patient for the chosen method of contraception, or make a referral to the physician if indicated. She will base her judgment on an awareness of the unfavorable sequelae of different contraceptive methods. She will counsel the couple in the use of their chosen method of contraception and will provide guidance, support, and appropriate follow-up.

The family nurse practitioner will function predominantly in ambulatory care settings where she will assume some responsibility for both acute and chronically ill patients. The nature of this responsibility will include taking a complete history, examining the patient, and initiating such diagnostic tests as seem appropriate. Based on her clinical impression, she will initiate treatment if it is within her scope of competence, or make the necessary referral. In working with the chronically ill patient, she will be responsible for the clinical management of patient in the stable phase of their illness, recognizing those complications or exacerbations which require consultation with, or referral to, the physician.

As one can see, such a practitioner in a rural community such as Gosport could be of great value to the residents. This type of family nurse practitioner would be able to provide the exact services requested by the participants in the survey. I must stress, however, the maintenance of a close

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and open communication system between the physician and nurse practitioner. Both must be committed to achieving a consensus regarding the patient's care, for "health care is most completely delivered through a partnership of various practitioners, for their combined expertise can offer more to consumers than professionals who practice in isolation can provide."  

There should also be an established treatment protocol. This could be provided through the cooperative action of the local hospitals, physicians, and other health care personnel. This would allow for monitoring the patient's physiological status and treatment. Visits to the physician could be reduced in number. The family nurse practitioner could alter the plan of medical care either independently when the protocol explicitly defined the course of action or after consultation with the physician when an unanticipated change in the patient's condition arose. It would be most helpful if the family nurse practitioner and a physician presented the concept together.

Another important aspect to remember would be that in order for community-wide acceptance to occur, education of everyone involved in the patient's care such as family, friends, physicians, nursing staff, pharmacists, office and

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administrative personnel as well as the general public is essential. The purpose and abilities of the family nurse practitioner as well as his/her function should be explained.  

Funding will be another big consideration to explore. The FNP could be paid directly for his/her services. If the practitioner was an extension of a particular physician's or group of physicians practice, the fee might be paid to the physician or group who would in turn pay the family nurse practitioner.

In order to facilitate referral on the part of the family nurse practitioner, the possibility of the physician visiting her central location in the community on a specified date at a set interval of time, such as every Wednesday, might increase the continuity of care. It might be possible for several physicians to rotate and share the responsibility for such referrals. Other possibilities would be some sort of transportation system available to the public in order that they might be able to reach the physician's office.

This proposal will hopefully be a guide for community action in regard to increased health care services to the citizens. Everyone has a right to the state of high-level wellness. The community could only be enhanced by a program such as this which helps insure the highest level of functioning for all its members.

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Ibid.
APPENDIX

HEALTH CARE SURVEY

Number of Members in Household: __________

Age and Sex of Individual Members:

1. __________ 2. __________ 3. __________ 4. __________ 5. __________

6. __________ 7. __________ 8. __________ 9. __________ 10. __________

Family Health History: (Have any of the following ever occurred in your family?) Please circle.

Cancer (Please name type) __________
Diabetes mellitus __________
Heart Attack __________
Stroke __________
Hypertension (high blood pressure) __________
Tuberculosis __________
Emphysema __________
Drug Addiction __________
Alcoholism __________
Venereal Disease __________

Asthma __________
Kidney disease __________
Polio __________
Rheumatic Fever __________
Leukemia __________
Birth Defect (Please name type) __________

Hearing Loss __________
Visual Impairment __________
Mental Retardation __________

Health Facilities Used in the Past or Currently:

Family Physician ________ or Clinic (list type) __________

How often do you visit? annually ________ only when ill ________ other ________

How far must you travel? ________

Do you have your own transportation? ________

If not, how do you get there? ________

Do you use any of the following types of health personnel?

Chiropractor ________ Dentist ________
Psychiatrist ________ Optometrist ________
Podiatrist ________ School Nurse ________
Gynecologist ________ Other (please name) ________
Nurse Practitioner ________

Would you use any of the above if they were available to you?

Yes ________ No ________

If so, which ones?

________________________________________________________

What do you consider "available" to mean?
Hospital (Please name.)
Approximate number of times used in past 3 years
Average length of stay
Reason for hospitalization: Please check.
surgery
pregnancy
diagnostic tests
other (Please name.)

How did you get there? (Please check.)
own car
relative or friend
ambulance

Other Facilities you may have used: (Please check.)
Planned Parenthood
Antepartal (Prenatal) Clinic
Vocational Rehabilitation Center
Mental Health Clinic
County Public Health Office
Any other type (Please name.)

In all the above, were you satisfied with the services?
If not, why?

What type of health facilities would you like to see furnished in our community?

What do you see as the possible financial resource for such services?

What do you see as the major health needs of the community?
List in order of importance.
1.
2.
3.
BIBLIOGRAPHY


