

Michigan Dairymen Indicate Demand for Veterinary Services and Client Education

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The Veterinary Medicine Extension Program at Michigan State University has as its primary goal the development of continuing education programs for veterinarians and their clients. This program utilizes the local veterinarian rather than the extension veterinarian as the primary teacher for livestock owners. The extension veterinarian serves as a resource person for the local practitioner by making available to him visual aids and printed materials for conducted client meetings. The local practitioner has much greater control over what his clients learn and how they use his services. The client learns to regard the local veterinarian as the expert who can be contacted for help. The county extension agent is an excellent local resource person aware of the client's needs and interested in helping to meet them. He can help plan the meeting, provide slide projectors, meeting rooms, and contact clients. A good relationship among extension veterinarians, local veterinarians, extension agents, and clients is essential for a successful extension and client education program (5).

Veterinary Medicine Extension area at Michigan State University initiated a pilot client education program in the Ambulatory Clinic in 1974. The purpose of this program was to develop

course outlines, visual aids, and printed materials for five topics which would be presented to ambulatory clients and later made available to practicing veterinarians for client education short-courses. This course was also designed to give students an opportunity to participate in client education programs which have been characterized as a key to a successful large animal practice (2).

A planning session was held in the Summer of 1973 with the local county extension agent and the local dairy advisory committee. The five topics mutually agreed upon were:

1. Getting Cows in Calf
2. Preventing Calving Problems
3. Preventing Mastitis
4. Preventing Respiratory Diseases
5. Preventing Digestive Disorders

The client education meetings were held in a classroom of the Veterinary Clinic once each week from 10 a.m. to 3 p.m. during January and early February. Extension agents from four other central Michigan counties requested that dairymen from their areas be included. Approximately 100 dairymen from five counties participated.

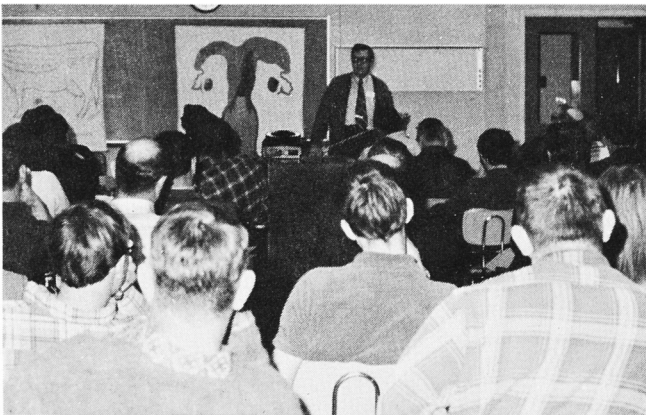


Figure 1. Client Education Program conducted by the Ambulatory Clinic and Extension staff at Michigan State University. The title of this presentation was "Getting Cows in Calf."



Figure 2. Clients practice artificial insemination technique with the aid of straws and colored dye to simulate placement of semen as part of educational program designed to improve breeding efficiency.

Questionnaires designed to gain information about health management practices and to determine the market potential for herd health and client education programs were completed by one dairyman from each farm. Some of the individual questions were designed to encourage dairymen to consider incorporating management, record, and veterinary procedures into their program.

Dairymen Profile

The questionnaires were completed by dairymen from five counties. The 62 herds averaged 75 cows with an annual production of 14,477 pounds of milk. There were 2.25 veterinarians providing service to each of the 62 farms, primarily because of group practices with more than one veterinarian visiting each farm. Forty percent of the herds use the services of the Ambulatory Clinic at Michigan State University. Over 90% of the dairymen indicated that they tried to give their veterinarian a good idea of the amount and kind of work to be performed prior to arrival at the farm and 75% indicated that they made an effort to organize veterinary work and have records available for their veterinarian prior to arrival. This latter group did the best job of notifying the veterinarian what to expect upon arrival at the farm. It is to the veterinarian's advantage to provide clients with record keeping systems which encourage organization and help prevent surprises. For example, a worksheet designed to record the calving, estrus, and breeding information on the cows to be included in a routine herd reproductive examination visit helps serve this purpose.

Record Keeping Procedures

These dairymen, representing 62 central Michigan farms, reported the following information on records: 42% kept an individual cow health record, 68% used an estrous expectancy chart, and 90% used the barn breeding chart to record disease conditions, estrous periods, and breeding dates respectively. Many dairymen indicated they would like help from their veterinarian in setting up record systems, recording the veterinarian's diagnoses and treatments, and using the records to generate periodic summaries to evaluate the results of management and herd health programs. There is a need for an economical computerized program to summarize the results of herd health programs and replace time-consuming hand calculation methods.

Economics of Herd Health Programs

The 62 herds reported they spent \$10.58 per cow annually for veterinary care, which is less than the \$12.70 reported for 19 herds receiving emergency care only and \$20.29 per cow for a complete program in 1971 (8). Since the dairymen did not have their records present at the time of completing the questionnaire, this value may not be accurate. The fees charged by their veterinarian were rated as high by 29% of the dairymen and fair by the other 71%. These dairymen were also asked to rate the return

received for each dollar invested in veterinary service. An estimated return of \$5.47 per \$1.00 invested was reported by 35% of the dairymen while 64% had no idea of the benefits gained. Although it is difficult to place an economic value on the return received from the investment in veterinary service, the rates of return reported per \$1.00 invested are 2.96 (4) for Minnesota, 5.50 (9) and 6.47 (6) for New York and for Canada - a range of 0.33 to 5.02 (3). The rate of return increased with the veterinary investment and production per cow in the Canadian study. There is a continuing need to objectively evaluate the economic benefits which result from an investment in veterinary care for food producing animals.

The results of this study indicate that the veterinarian is in the best position to educate dairymen concerning the value of preventive medicine; however, the fact that 64% of the dairymen had no idea what the anticipated economic returns might be indicates that veterinarians had not done a satisfactory job of educating these dairymen concerning the timing, type, and value of veterinary services.

Reproductive Health Programs

Since two of the client education meetings were devoted to topics on reproduction, a number of questions in the survey were also devoted to this area. These dairymen reported that the average interval to the first postpartum estrus was 27 days and to first breeding was 73 days. The first service conception rate was 59% and average calving interval was 13 months. Nearly 50% of the 62 herds were on reproductive health programs while others indicated they were aware of the benefits and had a desire to initiate such a program. A few dairymen reported that their veterinarian was too busy working with food consuming animals to spend time on reproductive health programs in food producing animals. The examination schedule for a reproductive health program was listed and the dairymen were given the opportunity to indicate what procedures were employed in their herd. The percentage of farms using these veterinary examination procedures are given (Table 1).

Although many dairymen indicated that they were following the recommended reproductive examination practices, it was not possible to determine from the questionnaire what percentage of the 4656 cows in

Table 1
Reproductive Health Examination Procedures on
62 Central Michigan Dairy Farms

%	Procedure
97	Cows with abnormal discharges
46	Cows 30 days postpartum
90	Cows anestrous 45 to 60 days postpartum
84	Cows with abnormal estrous cycles
80	Cows bred 3 or more times
66	Pregnancy examination

the study were receiving each of these veterinary examinations since the percentages were reported by farm rather than by cow. These results indicated that the market potential existed for increasing the number of postpartum and pregnancy examinations to approximately 80% of the cows from 46 and 66%, respectively, in the herds served by the Ambulatory Clinic.

Vaccination Procedures

The number of animals vaccinated for various diseases are listed (Table 2). The explanation for the high percentage of animals being vaccinated for Brucellosis is that Michigan has a law requiring that all animals sold for breeding purposes must be calfhood vaccinated. Approximately half of the animals in the 62 herds were vaccinated for IBR and BVD. These two diseases were discussed in one of the client education meetings with a strong recommendation for vaccinating replacement heifers between 8 and 14 months of age. As a result, heifers were vaccinated in nearly all herds on health programs in the Ambulatory Clinic practice. The number of farms vaccinating for the other diseases listed (Table 2) was limited either by the economic importance of the disease in the herd or the lack of an efficacious vaccine. For example, it is not necessary to vaccinate for Vibriosis in a majority of these herds since they are using artificial insemination.

Drug Purchases

These dairymen were asked to name the major source of drugs purchased. The results were as

Table 2
Vaccination Procedures on 62 Central Michigan Dairy Farms

%	Criteria
88	Brucellosis
58	IBR
52	BVD
14	Mastitis
14	Scours
6	Shipping Fever
6	Vibriosis

Table 3
Reasons Given by 62 Central Michigan Dairymen for Purchasing Drugs From Veterinarians and Other Sources

Reason	Veterinarian	Other Sources
	(%)	(%)
Cost	6	51
Quality	6	3
Convenience	33	20
Availability	25	23
Health Information	30	3
	100%	100%

follows: veterinarian 53%, feed and supply store, 25%, mail order 22%. The next question asked the reasons for selecting a particular source for purchasing drugs (Table 3). Drugs were purchased from the veterinarian primarily because of convenience, health information, and availability; however, the predominant reason for not purchasing them from the veterinarian was cost. Quality was not an important factor for the dairymen in making the purchasing decision. The same product is frequently available from several sources. In a previous study ten years ago, cost was also ranked as the major reason by 153 dairymen for not purchasing drugs from the veterinarian (7).

Drugs sold by the veterinarian must be competitively priced in order to build the client's confidence and to establish strong client relationships. The markup on drugs must be sufficient to cover the administrative and carrying costs and return a small profit. A recommended markup procedure is one that takes into consideration not only cost but other factors that affect the price of a product such as turnover, demand, and competition. This results in a variable markup. This variable pricing system allows the sale of products available from several sources at competitive prices and a larger markup on prescription items.

Veterinarians have a responsibility to sell prescription products at reasonable prices. A variable markup which averages approximately 25% on all products will pay administrative and carrying costs and return a profit to the practice. The major share of practice income should be derived from charges for professional services.

Dairy Farm Advisors

These dairymen representing 62 farms were asked to rank various farm advisors as a source of information on genetics, feeding, health, and management (Table 4). The results by individual areas were somewhat predictable. For example, the AI representative ranked number one on genetic problems, feed representative on feeding, veterinarian on health, and extension agent on management. In the final ranking which combined all of these areas, the veterinarian

Table 4
Resource Personnel Used by 62 Central Michigan Dairymen

Source	Rank by Subject				Rank
	Genetics	Feeding	Health	Management	
Veterinarian	2	4	1	3	1
Extension Specialist	3	2	2	2	2
Extension Agent	4	2	3	1	3
AI Rep.	1	6	4	6	4
Feed Rep.	6	1	5	4	5
Neighbor	4	5	6	4	6

ranked number one ahead of the extension specialist, extension agent, AI representative, feed representative, and neighbor. A previous study reported the final ranking to be identical to this one (6). The high regard in which the dairyman holds the veterinarian has also been reported in a national magazine survey (1).

Delivery of Veterinary Services

One of the primary reasons for the questionnaire was to determine methods of improving the delivery of food animal medicine. These dairymen rated the help and services provided by their veterinarian as follows: 46% excellent, 44% good, 8% average, and 2% poor. They were pleased with veterinarians' performance as indicated by the 90% excellent and good rating. In order to be more specific, the dairymen were given a list of suggestions for improving the delivery of veterinary services and to check all areas as applicable to their farm (Table 5).

Table 5
Suggestions of Central Michigan Dairymen for
Improving Delivery of Veterinary Services

%	Criteria
41	Provide Educational Materials and Meetings
30	Discuss Treatment Procedures
27	Show More Interest in Herd
12	Charge Lower Fees
9	Stay on Time
8	Discuss Fees
6	Provide Higher Quality Veterinary Medicine
6	Provide Better Service
3	Bring Fewer Students to Farm

Educational materials and meetings were requested by 41%, a discussion of treatment procedures by 30%, and a need for the veterinarian to show more interest in the herds by 27% of the dairymen. Other areas listed were relatively less important. The large number requesting educational materials and meetings may have been biased by the fact that the information was collected at a client education meeting; a previous survey recorded essentially the same results (7).

All of these suggested ways of improving veterinary service focus attention on the nonmedical aspects of practice. They indicate a need on the part of the client for the veterinarian to be an educator, communicator, and humanitarian with an expressed care and concern for helping the dairymen achieve a profitable, high producing herd.

The dairymen were also asked to list topics that they would like discussed at future meetings and areas where they would like help. Although there were many topics and areas listed, a majority of the suggestions pertained to nutrition; balancing rations, effects of nutrition on health, and effects of nutrition on reproduction. As a result, special emphasis was

given to developing a nutritional health program for ambulatory clinic clients in 1975-76. In response to clients' request for educational materials, a monthly newsletter was initiated which included topics on nutrition, nutritionally related diseases and seasonally related subjects which pertained to problems occurring in ambulatory clients' herds.

Evaluation of Client Education Programs

Approximately 100 dairymen attended the client education meetings and evaluated each program on the basis of excellent, good, fair, or poor. All five programs were given either an excellent or good rating. A subsequent meeting devoted to nutritional topics was held for ambulatory clients only. Twenty-three of 30 farms were represented by one to five individuals. The results of the nutritional program developed as a result of this study will be reported in a separate article.

Conclusion

It was concluded that there are advantages to conducting a survey to determine the clients' interests and to develop improved methods of providing preventive medicine programs to meet the contemporary needs of food producing animal clients. The dairymen's primary suggestion for improving veterinary service was to provide educational materials and meetings. One way to achieve this goal is for university extension veterinarians and county extension agents to work with the local practitioner to establish client education programs. This program identifies the practitioner as a local expert and encourages clients to make greater utilization of veterinary service. Client education enables the practitioner to upgrade the skills of both practice and clients, directs practice growth in a manner consistent with practice goals, improves the health of the livestock population, and increases the net income of both the client and veterinarian.

This client education program is designed to develop teamwork among the practitioner, client, county extension agent, and university extension veterinarian to provide a firm foundation for a successful livestock practice.

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