

PREPARING OPTOMETRY FOR THE THIRD MILLENNIUM

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As we move towards the year 2000, having experienced a century of remarkable technological ingenuity, fanaticism and cruelty, which was geared in distressing measure towards man's destruction of man and nature in general, optometry needs to do all within its power to help change the behavior of mankind so as to ensure peace and progress in the third millennium.

As a health-science discipline, optometry must assist in improving man's vision and help him focus on the good things necessary to bring about better standards of living and a better quality of life for all human beings. At a more esoteric level, optometry must accept its responsibility in the area of vision care and base its major interventions on meaningful epidemiological studies which focus on the prevention and elimination of vision errors and on the enhancement of visual function.

By virtue of its past record, optometry seems to be gaining in importance, stature and public acceptance for the services it has rendered in filling human needs. The Optometric Extension Program Foundation can be especially proud of the contribution it has made in shaping optometry's present-day image and for its holistic and futuristic philosophy.

In preparing optometry for the third millennium, we need to acknowledge with deep respect and gratitude the foresight of our founding fathers and the others who followed in providing us with the platform to develop our profession and growth towards the future. Today we pay homage to A. M. Skeffington and E. B. Alexander,

the founders of OEP and to G. N. Getman, Tole Greenstein, C. B. Pfeiffer, E. B. Forrest, C. B. Margach, and other great thinkers who have passed on, for the wonderful heritage they have left us. We must also not forget the essential contributions of non-optometrists who helped develop OEP philosophy, either actively or passively, knowingly or unknowingly. We are truly most grateful to Gesell, Harmon, Piaget, Bartley, Selye and a host of others for their valuable insights.

OPTOMETRY AND CHANGE

Preparing for the third millennium demands introspection of present-day and past optometry and projections about the optometry of tomorrow. To do this requires an understanding of the phenomenon of change over time and with respect to the definition and role of optometry.

Optometry's history shows that it evolved early in the second millennium from the discovery that the magnifying effects and refractive power of transparent beryls and worked glass could aid near-point focusing difficulties which accompanied the aging process. Optics and vision science progressed to a higher level somewhere between the 11th and 13th centuries, when spectacles could and, in fact, had to be made to serve man's increasing needs as he emerged out of the Dark Ages. The Renaissance, industrialization and urbanization introduced a new phase in man's existence, which had been, hitherto, largely rural and agricultural. The thirst for new knowledge and the demands of urbanization neces-

sitated the creation of new industries and the development of new skills and handicrafts. The invention of the printing press and the commitment to universal literacy hastened the need for better lenses and more knowledge about vision. Optometry at this time combined the manufacturing skills of spectacle makers with that of spectacle vendors, who required no scientific knowledge to sell their wares to a customer, who made his or her selection by trial and error.

PROFESSIONAL OPTOMETRY

The birth of professional optometry needs to be seen against the background of the evolving society after its emergence from the Dark Ages. A gestation period of some four or five centuries gave birth, eventually, to the age of European enlightenment and a secular view of education and science. The industrial civilization developed speed in the wake of Newton's discoveries and through the use of fossil fuels to drive the machines of new technology.

The importation of European ideas, largely through immigration and combined with the democratic form of government of the United States and its educational policy, gave rise to a new affluence which made its impact on all phases of American life. With this came a radical redistribution of, as well as creation of, new jobs. Farm labor, which accounted for 60% of the work force in the 1860s, declined to less than 10% in the next century. The availability of rich natural resources and the reduction in cost

of most commodities caused a significant improvement in America's standard of living. Finally came the realization that increased education was necessary to uphold and advance the improved quality of life. It is, perhaps, for this reason more than any other that the need for service professions arose.¹

By definition, a profession means "an occupation that properly involves a liberal, scientific or artistic education or its equivalent and usually mental rather than manual labor."² Traditionally, professions have been expected to make use of their specialized knowledge and experience in rendering a service and to make an ethical commitment that their skills will be used for the benefit and well-being of others. At a more altruistic level, a profession should be measured by the efforts it takes to eliminate the causes of the problems which brought the profession into existence in the first place.³

It should not be surprising that optometry was first established as a profession in the United States at the turn of the 20th century. Although the calling was handed down, initially, on a flexible apprenticeship basis, it did not follow the guild traditions of England and Europe, which in many respects acted to pass the same trades and skills from one generation to the next.

In the United States, with the explosion of new knowledge and scientific discovery and greater public awareness, the time was ripe to approach the universities, which were receptive to new ideas and the implementation of academic programs which were service-oriented. 1910 thus saw the establishment of a two-year optometry program at Columbia University. By 1915 the first four-year Bachelor of Science in Optometry degree program went into operation at Ohio State University, and by 1936 this university offered its first optometric Ph.D. program. Although this short resume by no means tells the whole story of all the U.S. university-affiliated and non-affiliated optometry schools, or attempts to describe the birth of professional optometry in other parts of the world, it should serve to provide an insight of how professional optometry began. The changes which have taken place since then with regard to optometry's growth and development seem natural to the cause of inevitable change.

CHANGE

Change is defined: "to become different and to enter upon a new phase."² To understand this is to recognize that all nature is in a state of flux. Growth and development in human function and behavior are testimony to human survival in the face of altered states of living. Preparing for change requires mental and physical flexibility and fitness which allows one to become different and enter upon new phases of developmental growth. It takes intelligence, however, to benefit from the experiences of living and to anticipate and plan for a future. With the power given to man, to the extent that he can control change, it is vital that he does not effect change for change sake, but that he does so intelligently in the interests of conserving nature and his universe.

In striving to make the most of his life, man depends on his innate endowments and the level of freedom he enjoys to interact with his environment. His goals are limited by his intellect as well as by physical, emotional and cultural hurdles. It seems, too, that man is also limited from reaching his full potential because various cultural and social forces have conspired to keep it hidden and as a result he does not possess the knowledge and the skills necessary to perform maximally. With ignorance about his true potential, it is no wonder that man lacks a measure of realism and does not believe in himself sufficiently.⁴

OPTOMETRY'S SOCIAL RESPONSIBILITY

Man, in this last century, has advanced further technologically than in all previous centuries combined. Much of that technology has been dehumanizing and used as a hateful instrument to destroy men and nature. If we are to recognize that this is evil wrongdoing, then our preparation must be one of improved human relations and the conservation of our planet with all its inhabitants. We should not be afraid to clamor for the impossible dream; neither should we be blinded by illusions and the enormity of the challenge that faces us. In our small way, optometry's changing role in addressing its responsibility towards society clearly must be related to society's own perception of its needs and what it expects from optometry;

and, likewise, optometry must assess society's vision care needs and what it expects from society in order to fulfill those needs.

Briefly stated, society requires optimal health vision care, which is available, accessible, affordable and able. Society needs vision care practitioners who are competent, compassionate and caring and who are prepared to cooperate with colleagues, practitioners in related health care fields as well as with other persons, and society in general, in order to ensure optimal vision care services.

Optometry requires the willingness of society and the individual to become educated in those areas of self-regulation, where responsibility needs to be taken with respect to visual hygiene, the prevention of vision errors and the promotion of visual efficiency.

Optometry requires the cooperation of society and all persons concerned with health/vision care so that each may build up a knowledge and mutual respect for the expertise that exists in the different specialized areas and so that teamwork and cross-referrals may take place in the interests of improved services.

Epidemiological Studies

In order to prepare for the future, optometry must recognize the diseases and problems of chance, choice and poverty,⁵ and needs to conduct epidemiological studies on its own and in cooperation with other disciplines. It is vital to know those factors which contribute to visual anomalies and those which contribute to visual health so as to give these our best and most appropriate attention. It is also necessary to establish effective data banks which can pool the collective knowledge about the visual status of optometric patients and the effectiveness of optometric interventions.

OPTOMETRIC PHILOSOPHY

Optometric philosophy is bound up with optometric practice and it is for this reason that its development over time should be appraised. Optometry grew out of the handicraft of spectacle making and opticianry, which plied its trade as spectacle shopkeepers. To this was added the commitment towards a scientific education and the acceptance of the respon-

sibility of a health professional. It is this dichotomy of interests which has caused the public and optometrists themselves to question whether they are businessmen or professionals.

It is also fair to assume that optometric philosophy has been influenced by the philosophy of the western culture in which it has grown. Optometry has flourished in the free market system of the capitalist countries and gained little or no foothold in Russia and the other communist and socialist states. It is on the back of the free market system that optometry has made commensurate technological advances in the last century. It may be said that optometry has capitalized on an educational system which has been dedicated towards giving the student the opportunity to develop high level skills and has been fortunate in keeping up a supply and demand ratio, which has allowed for the employment of most of its graduates in the specialized fields of their choosing.

The Influence of Medicine

There can be no doubt that optometry used the older profession of medicine as a role model and inherited some of its strong and weak characteristics. Initially, medicine was practiced in a holistic way with the family doctor acting as a confidante, counselor and generalist who attended to the patient's medical and surgical needs. While there developed a strong bond between the doctor and the families he treated and a collegiality among doctors, the fact that doctors were trained in institutions of higher learning resulted in feelings of elitism and a suspicion or disdain for non-medical health practitioners, who were regarded as charlatans and fortune hunters.

Optometry entered the professional scene at the time when medicine was giving birth to its first restricted areas of specialized practice and, in many respects, optometry also regarded its area of practice as a specialty. However, with medicine's development of the concept of primary and secondary health care pertaining to general and specialist practice and tertiary health care pertaining to hospital practice, optometry began to see its role as primary care general practitioners in the field of vision health care. Although medical specialist registers are very well entrenched today, optometry has

not followed this route, in spite of the fact that optometry has also developed a number of very well defined specialty areas in which some of its practitioners have chosen to practice exclusively.

Another aspect of medicine which optometry adopted initially was the philosophy of solo practice, which gradually evolved towards group practice. Whereas medical doctors have always practiced on their own account, optometry has not done so exclusively and non-optometric corporates have also profited financially from optometric services. The trend toward this type of non-optometric control has escalated in the United States and other countries where it has not been restricted by legislation.

Models for the Future

Optometry has to go to the drawing board today to prepare its models of practice to meet the needs of the future. The public has lost much of its awe for the professions and has used the weapon of consumerism to corrode and do away with the privileged positions and statutory protection which the professions previously enjoyed. While professional associations have tried to enforce ethical rules, especially with regard to the advertising of services, the legislators and the courts have ruled otherwise in order to break professional monopolies and to provide the consumer with a wider and freer choice of services.

The problems of third party payments for professional services has served to raise health service budgets to astronomical highs and the system has been open to an enormous amount of administrator, practitioner and client abuse. In the final analysis it has been the consumer who has had to foot the bill for these services.

The public has realized that it has reached a point of diminishing returns from investment in traditional approaches to health care. There is no question that health care philosophies require to be addressed with great urgency with the focus on the preservation and enhancement of health and the containment of disease. It is essential to plan health budgets which apportion more for preventive and enhancement health services than to curative services.

If the major countries of the world can recognize that they need each other to

survive in the third millennium, then surely the major vision care providers should also come to this realization. Health care services need to be rationalized and coordinated in such a way to make every capable and thinking citizen accept a positive role in making the world a healthier and happier place in which to live.

Our models of the vision care practitioners of tomorrow must be seen to be more appropriate to the public's major needs and our curricula must ensure that we are not under- or over-educated and, just as important, that we spend our time doing that for which we are most needed and best trained.

Knowledge and Learning Requirements

Optometry, as part of the vision health care team, has specific knowledge and learning requirements in order to fulfill its future mission. In order for this to be achieved, there has to be a change of attitude on the part of those who have actively and intentionally restricted optometry's access to this information. The language of vision care needs to be universalized, embracing all its contributors so that there can be freer and better communication.

Modern technology has facilitated a system of accessing current knowledge with great speed and little effort through the use of computer-linked data banks which are continuously being updated. The advent of the computer has profoundly changed the human need to store knowledge and facts which are exponentially becoming outdated and obsolete in shorter periods of time.

With less necessity for learning by rote, learning requirements have acquired a new perspective. The emphasis has shifted towards teaching and developing thinking and problem-solving skills and in teaching computer and other type literacies to provide ready information.

Mastering Technology

No optometry school of today can ignore the necessity of providing its students with a basic education in computer and communication sciences, as well as courses in organization, decision making, public relations and management.

Because optometry is involved with

attempt to integrate the student from the inception into the clinical world of optometry. This serves to develop and enrich clinical experience from the start and to provide the student with the real life problem-oriented background which he will have to face during his lifetime in practice. It will also serve to impress on the student the open-ended nature of changing problems and the need for a lifelong continuing education. As humans move towards the third millennium with greater prospects of longevity, optometrists of the future will have to accept the responsibility of improved vision care services for an increasing number of patients.

CONCLUSION

Preparing optometry for the third millennium means preparing optometrists as individuals and collectively to change their own attitudes and to do all within their power to influence a similar change of heart in society.

As individuals we need to develop greater honesty and sense of purpose and become more family and community conscious and oriented. Together we must help restore the vision which will enable us to identify and focus on the beautiful and meaningful things in life.

The last decades of the second millennium have proved to be a watershed of world ideologies. They have been marked by a huge resurgence in faith in the capitalist market system at the expense of confidence in the capacity of the socialistic economies. The "freedoms" of capitalism, which appear to have sprung from instincts deep in our human nature, have allowed the capitalistic world to create wealth on a scale never before dreamed of. However, even though the world has finite resources, capitalism has also caused these to diminish dangerously and through redistribution has been responsible for more abject poverty.

While capitalism appears to have won the economic battle over communism in the 20th century, it cannot be said that it has won the battle over poverty or the moral dimension which justifies it. Wealth creation in and of itself does not produce happiness and true fulfillment, and while it is necessary for well-being, it needs to be tempered in some way so that the materialistic race does not get out of hand. We need to give up our moral neutrality

and the single-minded thrust of our productive market system which has allowed for the generation of as much evil as good. Above all, we need to replace our materialistic, impersonal and non-human value systems for those which are sincere in true caring for human life and its continuance on earth. In spite of the negative growth in some societies, there are real prospects of overpopulating the planet Earth and optometrists may well have to set up clinics and practices on space stations and on other planets.

May OEP live to see this day and may we all go forward as the pioneers of tomorrow, in love and with arms linked to fight only ignorance, injustice and prejudice and with the noble mission of preserving God's earth and his universe.

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