

THE PHARMACEUTICAL SOCIETY OF HONG KONG

SUMMARY ON THE RESPONSE TO THE HEALTH CARE REFORM REPORT

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Rather than asking for a complete separation of the dispensing and the prescribing system, it is imperative to first nurture an environment deemed to be appropriate for this to occur. The bottom line is that pharmacists, as a profession, do not think that the present time is a right moment to reach such a drastic stage, that is total separation of dispensing and prescribing. The following is a list of suggestions to prepare the health services to cater for such a change eventually and these proposed attempts go in line with "Those who can pay shall pay for themselves" as health care expenditures are ever rising.

MAIN PURPOSE OR THEME:
DECREASE HEALTH CARE EXPENDITURE AND ENHANCE PROFESSIONAL ROLE

Consultancy Role

Pharmacists are not only drug experts. They also have access to the price information. That means they can give advice on the appropriate drugs of choice according to the budgetary needs of the hospital administrators or others who are concerned about "money".

HK\$ 970 million was spent on drugs among the health care expenditure in 1995-96. And in 1997, this rose to over 1 billion. There are various measures taking place within the Hospital Authority that has proved to be effective:

e.g. Drugs Utilization Committee
Drugs and Therapeutics Committee

Pharmacists also play a role in bulk drug prescribing for hospital as they can also act as advisors.

Self Care

Increase of pharmacy only medicine

Pharmacists can be the frontiers in self-care. In this way, they can participate widely and actively in primary health care, as pharmacists can be easily accessible. They can help shoulder some of the burden now borne by the Accident and Emergency Department. Fewer patients will then go to A & E for the services as they can seek help readily from the community pharmacists. Facts to support this can be found in

- Denmark- started in 1989 to increase the number of Pharmacy Only medicines (POMs) deregulation of 81 products with the aim of saving £90 million as a result, expenditure being cut down successfully no evidence of increase of adverse drug reactions
- U.S.A.- began reviewing in 1972 for the OTC products available in the market also successful
pharmacists then act like adviser on minor ailments like stomachache, cold, etc.

(Adapted from BMJ Volume 312, 9 Mar 1996 P.631)

The inclusion of more pharmacy only medicines implies a greater input to primary health care by community pharmacists. This is in echo with the report which criticized that there is too much money spent in the hospital sector. "Hospitals are dominant institutions providing health care in Hong Kong. Hopefully, there is a healthier balance between the two settings."

Setting up of a monitoring system

In a system where from diagnosis to dispensing of drugs are performed by one person, there is a lot of shortcomings in terms of efficiency and quality. Pharmacists are part of the health care system. And if there is separation of dispensing and prescribing in the system, prescriptions can be screened by two health care professions. The safety and quality of the prescriptions are double-checked. This minimizes errors and is in the spirit of Continuous Quality Improvement with better service for the patients. Data collection is also being enhanced as the Report emphasises the need to establish an Institute to collate overall data and to overlook policy Issues.

All health care providers should have a common mission and that everyone works towards a common goal with the monitoring system. Professionals can help monitor each other to achieve the objective of improving the service for patients.

Complaints Channel

Patients should have a channel through which they can voice their opinions. That way, any clinical incidents happening to them, whether they are drug-related or price-related, can be reported to an Institute. Data derived from here can help improve the system.

And that according to the comments received, the service provided can then be improved. There is a greater say for the general public and various interest groups. There is great variability in standards within the present system as there is no particular independent monitoring body to regulate as well as to interfere.

As Educators

Pharmacists can help in the education of the public on the drugs during counselling and perform health promotion to the public especially in the community settings. Issues that will be touched on include:

1. possible side effects
2. ways of avoidance of these side effects
3. how to optimize compliance on drugs
4. modification of lifestyle to combine with drug treatment
5. prepare pharmaceutical care plan
6. promote healthy lifestyle and preventive measures
7. enhance communication between health care providers and the public

A lot of the wastage of drugs is caused by side effects. Patients just resort to discontinuation of taking the drugs instead of reporting these back to the doctor. This has shown the lack of education.

Other possible education topics include:

1. immunization
2. family planning
3. various screening tests
4. chronic disease management
5. maternal and children health care
6. drug and alcohol abuse prevention

During the process, help can be solicited from the Education Department and the Environmental Protection Department in creating the public education sessions. An idea has been given in the Report, i.e. the setting up of the patient education

office by the Department of Health. Pharmacists should be invited to participate in and organize such events.

As an interface between private and public sectors

In the report, the health care system of Hong Kong has been criticized to be one that is highly compartmentalized. Pharmacists are in an appropriate position to take care of this bridging between the hospital and the community. As one might already be aware, there is the redistribution of prescriptions from the hospital to the community setting such as the Viagra tablets. And in the coming year, more products are expected to fall under the self-needs rather than the health-needs category. For such kind of drugs, the concept of “those who can pay shall pay for themselves” should apply.

As health expenditure is increasing day in and day out, pharmacists can act as an interface between the hospital and community settings.

To Increase ownership of the pharmacy

The idea of having pharmacists as owners of the pharmacies are to be advocated. The main difficulty sometimes lies in the fact that pharmacists might not have the necessary capital to start off. It is hoped that the Government can start off with some sort of business loans to support the idea and legislation will provide a conducive environment for this to happen. This is advantageous to the health care field as that implies more control to the pharmacy services a drugstore could possibly provide.

Other suggestions

1. Development and support of the concept of the family physician. However, development of primary care pharmacist should also be started.
2. No matter which health care financing model one would adopt, the foundation of the health care system should put back into a right perspective before it can be sustained. A medical-dominant system will only lead to the health care expenditure on a continuous rise without any control by the one who pays the bill. As quality links with costs, one should establish a system that can guarantee an acceptable quality standard first before designing the financing model.
3. Education Department and Environment Protection Department should contribute more efforts in establishing a sustainable health care system.

Conclusion

Currently the environment is not appropriate and most conducive to implement a health care system of separation of dispensing and prescribing. There is a lot of

preparatory work that needs to be done in order to carry this out more successfully. Like other Western and nearby Asian countries, the separation does carry a lot of blessings to their health care system. The positive impact surely is beyond words. From a pharmacist's perspective, the eventual separation is really what we want to see. Not only will this optimize the benefits of the patients as a "consumer" of health care, we believe it is also a move to strengthen the health of our society as well as contributory to control the public health care expenditure to an extent.

**The Hong Kong
Society of Professional
Optometrists**

A
SUBMISSION
TO
THE WORKING PARTY ON
PRIMARY HEALTH CARE

The Hong Kong Society of Professional Optometrists

The Society was formed in 1982 by about twenty optometrists who graduated from various overseas universities. The aim of the Society is to promote high standards of eye and visual health care services to the Hong Kong public and to enhance the practice of optometry in Hong Kong. Current membership is now 140, consisting of graduates from overseas schools of Optometry (in the United Kingdom, Australia, Canada and the United States), and graduates from the Professional Diploma and Higher Certificate courses in Optometry of the Hong Kong Polytechnic. The Society represents the largest group of formally trained optometrists in Hong Kong.

The Society welcomes the opportunity to submit its comments on Primary Health Care in Hong Kong, and, more specifically, on Primary Visual Health Care.

Primary health care

“Primary health care is essential health care based on practical, scientifically sound and socially acceptable methods and technology made universally accessible to individuals and families in the community through their full participation. It forms an integral part both of the country’s health system, of which it is the central function and main focus, and of the overall social and economic development of the community. It is the **first level of contact** of individuals, the family and community with the national health system bringing health care as close as possible to where people live and work, and constitutes the first element of a continuing health care process.

Primary health care addresses the main health problems in the community, providing promotive, preventative, curative and rehabilitative services accordingly”.

These statements regarding the scope of primary health care are extracted from the International Conference of Primary Health Care, Declaration of Alma-Ata, 1978 (1). They are presented to provide a working definition of primary health care upon which to base comments.

The Society considers that the terms of reference of the Working Party on Primary Health Care to be too narrow in that the emphasis of these terms of reference is biased heavily towards hospital and institutional based services. It is the view of the Society that a review of primary health care services should encompass all health care professions which provide a point of first contact with health care. It seems to the Society that recognition has not been given to health care professions which provide promotive, preventative, curative and rehabilitative care, and that the role professions other than medicine and nursing play in providing health care should be considered in the overall planning of primary health care in Hong Kong.

Optometry as a health care profession

Optometry is an independent primary care health profession which encompasses the prevention and remediation of disorders of the visual system through the examination, diagnosis and treatment of visual disorders and the recognition and diagnosis of the related eye health and systemic manifestations.

The optometrist is a primary contact health care practitioner who cares for the functionally inadequate visual system. Optometrists are educated and trained in the normal and abnormal physiology of the eyes and the psychophysics of vision. Optometrists are trained to determine the health status and functional capability of the visual system, including the quantitative and qualitative evaluation of the refractive, accommodative, ocular-sensory-motor and perceptual components of the visual system.

Optometrists diagnose, treat and prescribe for conditions requiring orthoptics, visual training/therapy, preventive and corrective procedures and devices for alteration of vision anomalies. Optometrists are trained to employ a spectrum of pharmaceutical agents in their diagnostic procedures.

Optometrists diagnose ocular and systemic disease conditions reflected in the eyes and, as necessary, refer patients to the appropriate health care provider.

There is general recognition and acceptance that optometrists are well qualified to diagnose and treat refractive, accommodative, binocular and low vision anomalies. With the advent of legislation governing optometric practice in Hong Kong, the public will be more readily able to recognize the qualified practitioner.

Any controversy regarding the role of optometry as a primary health care profession has centred upon the ability of optometrists to detect the presence of disease during routine eye examinations.

Ample evidence exists within the medical literature attesting to the ability of optometrists to detect signs of disease during eye examination. (2-9)

Optometry has responsibilities in the following areas of primary care, as do other primary care professionals:

- prevention
- health education
- health promotion
- health maintenance
- diagnosis
- treatment and rehabilitation
- counselling
- consultation

A detailed description of the specific duties of the optometrist in carrying out each of these primary care responsibilities can be found in the appendix to this submission.

The optometrist and primary care

The status of optometrists as primary care practitioners has been formally evaluated by the Department of Preventive Medicine and Biostatistics, Faculty of Medicine, University of Toronto, 1980, in a study entitled “Vision Care: A Survey of Optometrists in Ontario”. (10)

This study investigated whether or not optometrists can fill the vision requirements of the “primary care” sector. Primary care was outlined as including all those services provided at the first contact of the individual with the health care system. Secondary care on the other hand, was considered as encompassing those “specialized” and “very specialized” services provided on subsequent (i.e. referred) contacts with the system.

Key factors involved in primary vision or health care were identified as including:

- (1) responsibility for prevention, promotion and maintenance of health
- (2) complete and continuous care, including referral where required
- (3) consultation, education, diagnosis, treatment and rehabilitation.

This study concluded that the review of optometric services conducted suggested that optometrists met the criteria of primary care practitioners.

Optometry is fulfilling this role as a primary health care practitioner in the health care delivery systems in other countries, notably the United Kingdom, Australia, Canada, United States and New Zealand; and is capable of filling the same role within Hong Kong, present and future.

Primary vision care

The Society considers the following points are applicable to primary visual health care, as they are to general health care.

1. Primary care constitutes the major vision and eye care sector. It is the first point of contact for the individual within the system.

2. Secondary care is a resource to primary care. In this sector, health services are provided to those individuals who require more specialized care or investigation than that which is available in the primary sector. Hospital or community health centre ophthalmological services could be considered to fall in this category of health care service. Consulting services provided by the Polytechnic's Department of Diagnostic Sciences also form a component of secondary level visual health care in this sense.

3. The links between primary and secondary care must be sufficient and strong enough to ensure continuity of care, regardless of where the services are provided.

4. A truly comprehensive system must be capable of dealing with the prevention of disease and with the promotion and maintenance of visual health.

5. The development of vision and eye care manpower resources must be guided by the principles that services should be -

(i) available and accessible

(ii) integrated, coordinated and efficient

(iii) sufficiently comprehensive in scope and of the quality required to meet the needs of the public.

The Society is concerned that, under the terms of reference of the Working Party, discussion on visual health care as a component of primary health care will tend to be limited to hospital or institutional based medical eye care, without considering the role of primary care optometrists.

The Society submits the following conclusions for the Working Party to consider in relation to primary visual health care.

The Society feels that consideration of these will improve the delivery of primary health care in its broader sense to the public; and will assist in the reduction of workload in the medical eye services, both institutional and private.

The conclusions also address some aspects of primary visual health care that the Society feels are not sufficiently provided for in the current health care system in Hong Kong.

The Society also respectfully suggests that the medical planning services give due recognition to the contributory roles of non-medical health care professions at the planning levels, and consider their involvement in the planning and future monitoring of primary health care services in their broadest sense.

Conclusions

1. Community health centres:

There is scope for a greater involvement of optometry in the provision of visual health care in community health centres, polyclinics, (and also hospitals). An integral part of the primary health care concept is the health care team.

Optometry can act as a contributor to the health care team in the community health centre in two ways:

(a) as a member of the community health centre team, ie employed by the community health centre on either full time or part time bases

(b) by the community health centre using optometrists in private practice external to the health centre as a referral recipient and/or source

Optometry contributing in either of these ways to the community health centres will serve to alleviate demand on medical eye care services by referring for medical eye care only those patients who need it.

2. Vision and visual health screening

These screenings are both health educative, promotive and preventative; and as such are integral parts of primary visual health care.

At present, involvement in both planning and implementation of visual screenings does not involve the input of the optometric profession.

The Society feels that there is scope for an increase in visual screenings as promotive and preventative measures for visual health care in Hong Kong. The Society itself participates in a number of visual screenings for various community groups and also Vietnamese refugees.

Optometric involvement as primary care practitioners can be

(a) planning

(b) implementing and participating

(c) follow-up - ie to receive referrals after the screening.

The latter point has particular relevance at the present time in relation to the screening under the control of the Special Education Department. At present, students who fail this screening are referred to Government Eye Clinics, the Polytechnic, and the General Eye and Vision Clinic of the Society for the Blind. Referrals from the screening are also able to see ophthalmologists in private practice. Referral to medical eye care in the first instance is not an appropriate use of both

primary and secondary level health care services.

3. Occupational and industrial eye and vision safety

This is an area that is currently neglected in primary visual health care in Hong Kong.

The Society considers that, in a review of primary health care, this aspect of preventative health care should be discussed; in conjunction with the Occupational Health Division of the Labour Department and the visual health care professions.

4. Visual health care for the institutionalised

The society feels that this is also a neglected area within Hong Kong primary health care services. Primary visual health care for the institutionalised (mentally handicapped, physically handicapped, the elderly) should form a part of the review of primary care services. Visual care for these persons should be a part of the health care team in these areas.

5. Visual care for the needy and underprivileged.

A basic foundation of primary health care is that it should be accessible and available to all. Under the current systems of visual health care in Hong Kong, visual care for the needy and underprivileged is not readily available apart from the secondary level in hospitals and government eye clinics.

The Society recommends that the Government develop and institute a subsidised eye care plan involving consultations and the supply of necessary visual aids at the primary level.

6. Assessment of the learning disabled child

Whilst recognising the controversy that surrounds this issue, the Society submits that assessment of the learning disabled child needs to be multidisciplinary, and based on the team approach. Optometric input into this assessment is utilised and valued in overseas countries.

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APPENDIX

This appendix details the scope of work and responsibilities of the optometrist in relation to the areas of primary health care.

1. Prevention

(i) to evaluate the systems of the body present in the eye, orbit and their adnexa in order to diagnose and treat, when appropriate, deficiencies contributory to sensory deficit and the onset of amblyopia and strabismus; further, to diagnose and refer eye and/or systemic disease.

(ii) to obtain and use family health and oculo-visual history in the process of assessment, diagnosis, counselling and therapies directed toward the prevention of vision deficits and to direct individuals to genetic counselling when appropriate.

(iii) to identify, through history and assessment, factors which place individuals or off-spring "at risk" to vision and ocular disorders or trauma and to provide preventive and corrective procedures.

(iv) to monitor the growth and development of ocular structures and visual functions so that impediments to these processes are detected and remedied at the earliest times.

(v) to provide education on ocular health and visual function to parents, children, teachers, specific occupational groups and the general public related to prevention and maintenance of ocular health and visual efficiency.

(vi) to provide planning, implementation, participation, monitoring and evaluation of vision screening of infants, children, institutionalized populations such as the aged, the mentally retarded and persons in work and recreational activities.

(vii) to assess and evaluate various environments, work activities, hazards to vision and proper illumination contributory to efficient and comfortable use of the eyes and visual processes so as to protect persons at work or at recreation.

(viii) to undertake and participate in research in conjunction with educational institutions and/or professional associations or other professions directed toward prevention of health/vision problems.

(ix) to contribute to the knowledge of the visual factors of ocular disease or loss of visual functions.

(x) to monitor, in cooperation with physicans, the visual functions and ocular structures of persons being treated with drugs where there is potential for side effects.

2. Health Education

(i) to provide and interpret information on ocular health, visual function, visual efficiency and comfort as well as general health factors contributory to the individual's welfare.

(ii) to provide information to patients on the use of their eyes, the frequency of eye care, eye protection, illumination, luminaries and hazards to eyes and vision.

(iii) to consider and advise patients on the ergonomics of vision.

(iv) to explain the nature of vision and the risks which result from genetic factors, toxic and disease agents and environmental hazards detrimental to the eyes or vision.

3. Health Promotion

(i) to act as a resource and to participate in the encouragement of children, young persons, parents, unions, industries and the public to practice preventive, protective aspects of eye care and visual processes.

(ii) to inform the public maintenance, particularly those aspects which place persons visually "at risk".

(iii) to inform the media of conditions, events and circumstances which contribute to effective and efficient visual functions and to identify factors which contribute to the occurrence of vision and eye problems.

(iv) to provide understanding of the part played by vision in human development and the caring process, so that maximum potential and efficiency are achieved and maintained in a manner promoting the full enjoyment of life.

4. Health Maintenance

(i) to undertake complete visual examinations of patients at appropriate intervals and to advise them on the care and treatments necessary to maintain efficient and effective vision.

(ii) to provide advice and recommend means by which vision and the visual system can be protected from factors which endanger sight or ocular welfare.

(iii) to provide continuing care and monitoring of persons with health conditions which may place their eyes or vision at risk so that they may seek the assistance of an appropriate practitioner at the earliest time so as to prevent or minimize vision loss or ocular damage.

(iv) to monitor and advise on the individual's visual system post-referral to physicians and other health professionals so as to assist in compliance with the treatment and advice provided by them.

(v) to prescribe, provide and supervise programs of visual rehabilitation after disease or surgical treatments have been completed or stabilized.

(vi) to provide continuing supervision of ocular health and visual functions in chronic or stabilized illness.

(vii) to advise patients on ocular safety and environmental hazards to vision and to provide protective devices.

5. Diagnosis

(i) to carry out a comprehensive health/illness history of patients and to examine eyes, orbits and adnexa, and the eyes as optical systems.

(ii) to use appropriate equipment and available technology to carry out oculo-visual assessment procedures. This may include standard oculo-visual assessment equipment, electrodiagnostic instruments, ultra sound devices, field plotters, binocular vision devices, low vision aids, laser interferometers, refractors, prisms, lenses, contact lenses, external and fundus cameras, refractometers, keratometers, retinoscopes, tonometers, biomicroscopes, direct and indirect ophthalmoscopes and a spectrum of drugs useful in the assessment of ocular refraction, binocular anomalies and the detection of diseases of the eye.

(iii) to use appropriate assessment instruments and procedures in the evaluation of perception.

(iv) to analyze data derived from history and assessment to arrive at diagnoses of patients' visual problems.

(v) to determine the health status of the visual system and the nature of anomalies or inadequacies requiring optometric treatments or referral with an adequate report to the health care practitioner to whom the patient is referred for care.

(vi) to diagnose ocular or systemic disease as is manifest in the eye and to refer the patient, when necessary, to the appropriate health care practitioner.

(vii) to identify the drugs used by the patient, whether prescribed, proprietary or illicit and to search for drug side effects which may contribute to ocular, visual, structural or functional problems.

(viii) to carry out investigations or procedures at the request of physicians and other authorities and to supply resulting information contributory to diagnosis, treatment or welfare of the patient.

6. Treatment and Rehabilitation

(i) to treat vision anomalies by means of lenses, prisms, contact lenses, sight enhancing devices, vision training/therapy, visual perceptual training/therapy and appropriate counselling on compliance with the prescribed treatment.

(ii) to prescribe vision training/therapy and treatment procedures and to supervise these procedures when therapeutically applied to the patient/s sensory motor problems. To instruct patients in the proper application of various training and orthoptic procedures whether they are performed under direct supervision or in the home environment.

(iii) to initiate low vision services, contact lens applications or other rehabilitative procedures so as to maximize the input of visual information and provide the patient with maximum opportunity for all activities.

(iv) to advise and provide appropriate protective devices for work, sport and recreational activities so the integrity of vision and ocular structures is maintained. This activity would include counsel on lighting, glare and radiation protection, as well as on other hazards.

(v) to supervise or provide aid in the selection and provision of the appropriate ophthalmic materials and to provide for the adequate fit of appliances. To verify the accuracy, quality and serviceability of optical devices used in treatment.

(vi) to refer the patient to the appropriate physician who may provide care and treatment in the presence of ocular or systemic disease and trauma affecting the visual system, or visual effects of undiagnosed diseases accompanied by the appropriate report, the referral to be made with a report of the optometrist's observations and diagnostic findings.

(vii) to carry out diagnostic findings for physicians, other health professionals and other authorities which may be contributory to their diagnostic process.

(viii) to access the efficacy of treatment procedures and to modify them as required to maximize patient benefits.

7. Counselling

(i) to provide patients with knowledge of the status of their vision and its conservation.

(ii) to provide patients with knowledge of their ocular health and its maintenance.

(iii) to provide information on protection of eyes and vision in various work, recreation and other environments.

(iv) to provide counselling in support of the therapies of other health practitioners so as to bring about compliance.

(v) to provide parents with knowledge of visual, perceptual and ocular development of their children.

(vi) to provide counselling on the use, function and quality of optical appliances provided to patients and to make them aware of resources available to promote their visual comfort and welfare.

(vii) to counsel those persons with vision impairment so that the full use of available resources can be brought to bear to maximize remaining visual function.

(viii) to assist the visually impaired to adapt to their condition.

(ix) to provide counselling on the general principles of health in its preventive and maintenance aspects as a member of the health team.

(x) to counsel the patient to seek genetic guidance when appropriate.

8. Consultation

Certain vision problems are of such a pervasive nature that they do not fall within the scope of a single individual or profession. When confronted with such situations, it is incumbent upon optometrist:

(i) to consult with other optometrists on the patient's behalf so that their skill can contribute to the effective care of the patient.

(ii) to consult with other health care practitioners such as physicians, dentists, genetecists and nurses as the patient's needs require.

(iii) to consult with teachers, psychologists, nutritionists, audiologists, occupational, physio and other therapist, as well as members of the clergy, as the patient's needs require.

The Hong Kong Society of
Professional Optometrists

香港專業視光師學會

**“A reply to the report by the
Working Party on Primary Health Care”
(1991)**

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Summary of the submission

1. The majority of the recommendations of the Working Party relating to health care delivery involve improvements and reorganization of the delivery of primary medical care services rather than primary health care in its fuller sense.
2. The report of the Working Party has not fully recognised and identified the role of the non-medical first contact health professionals, such as optometrists, within the scope of the delivery of primary health care services in Hong Kong.
3. Optometry has been identified as a first contact primary care practitioner. The contribution of optometry in the delivery of health care has been described.
4. Areas in which optometry can contribute to the delivery of primary health care in Hong Kong have been outlined. These fall within the areas of preventative health care and screenings, the student health system, occupational health, and the district health system.
5. To fully integrate the delivery of visual health care into the primary health care system in Hong Kong, Optometry should participate in the planning and implementation of visual health care services.
6. To enable this, the Society recommends that the Government consider establishing an Optometric Advisory Unit within the Health Department as an autonomous unit within the proposed Primary Health Care Authority.
7. The Government should proceed with utmost speed to enact the legislation governing the registration of optometrists. This will then allow the public to identify the qualified practitioner.

The Hong Kong Society of Professional Optometrists

The Society was formed in 1982 by about twenty optometrists who graduated from optometry schools in various overseas universities. The aim of the Society is to promote high standards of eye and visual health care services to the Hong Kong public and to enhance the practice of optometry in Hong Kong. Current membership is now approximately 230, consisting of graduates from overseas schools of Optometry (in the United Kingdom, Australia, Canada and the United States), and graduates from the Professional Diploma and Higher Certificate courses in Optometry of the Hong Kong Polytechnic. The Society represents the largest group of formally trained optometrists in Hong Kong.

The Society welcomes the opportunity to submit a response to the Working Party on Primary Health Care's report "Health Care For All"; and to expand on the Society's previous submission to the Working Party.

The Society wishes to comment on various sections of the report of the Working Party, pertaining particularly to the provision of visual health care in Hong Kong.

Introduction

The report of the Working Party on Primary Health Care indicates a number of areas in which the Working Party has identified scope for improvement in the delivery of health care services in Hong Kong, so as to work towards “Health Care for All by the year 2000”. Consideration of the Working Party’s recommendations shows that the majority of their recommendations relating to improvement of health care delivery involve improvements and reorganization of the delivery of primary medical care services, rather than health care in a more general sense. This is a no doubt a result of the terms of reference of the Working Party.

In its submission to the Working Party, the Hong Kong Society of Professional Optometrists noted that the terms of reference of the Working Party on Primary Health Care were too narrow in that the emphasis of the terms of reference was biased heavily towards hospital and institution based services.

It is the view of the Society that a review of primary health care services should encompass all health care professions which provide a point of first contact with health care. It seems to the Society that recognition has not been given to health care professions which provide promotive, preventative, curative and rehabilitative care, and that the role professions other than medicine and nursing play in providing health care should be considered in the overall planning and delivery of primary health care in Hong Kong.

The recommendations made cover areas as diverse as maternal and child health services, health care for the elderly and occupational health services. Examination of the recommendations in these areas demonstrates a commitment to improving the availability and standards of medical health care as the primary health care source. The recommendations largely ignore the role that other health care professionals can play in the delivery of primary health care, and the role which these professions can play in the planning and implementation of the primary health care system.

The concept of primary health care incorporates the definition of primary health care as the “first point of contact of the individual and the family with the health care system”¹. Within this context, the report of the Working Party has not fully recognised and identified the role of the non-medical first contact health professionals, such as optometrists, within the scope of the delivery of primary health care services in Hong Kong.

The responsibility to make health care accessible to all without restriction carries with it the responsibility to ensure that the costs of health care delivery are kept manageable. Appropriate usage of health care resources will serve to reduce the cost of health care delivery in Hong Kong. The full use of appropriately trained health care professionals in the roles for which they have been trained and in which they have made demonstrably successful contributions to health care will make the Government’s commitment to delivering health care for all easier to realise.

This submission will outline some areas in which the profession of Optometry can contribute to the development of the primary health care services in Hong Kong.

Reference

1. Working Party on Primary Health Care: Report - Health Care For All, pps 25, 29.

The Optometrist as a participant in primary care

1. Optometry defined

Optometry is an independent primary health care profession which encompasses the prevention and remediation of non-medical disorders of the visual system through the examination, diagnosis and treatment of visual disorders and the recognition and diagnosis of related eye and systemic manifestations of disease.

The optometrist is a first contact primary health care practitioner who cares for the functionally inadequate visual system. Optometrists are educated and trained in the normal and abnormal physiology of the eyes and the psychophysics of vision. Optometrists are trained to determine the health status and functional capability of the visual system, including the quantitative and qualitative evaluation of the refractive, accommodative, ocular-sensory-motor and perceptual components of the visual system.

Optometrists diagnose, treat and prescribe for conditions requiring visual training/therapy, preventive and corrective procedures and devices for alteration of vision anomalies. Optometrists are trained to employ a spectrum of pharmaceutical agents in their diagnostic procedures. Optometrists also provide advice and management of visual ergonomic and occupational visual problems.

Optometrists diagnose ocular and systemic disease conditions reflected in the eyes and, as necessary, refer patients to the appropriate health care provider.

There is general recognition and acceptance that optometrists are well qualified to diagnose and treat refractive, accommodative, binocular and low vision anomalies. With the advent of legislation governing optometric practice in Hong Kong, the public will be more readily able to recognize the qualified practitioner.

2. *The Optometrist as a primary care practitioner*

The status of optometrists as primary care practitioners has been formally evaluated by the Department of Preventive Medicine and Biostatistics, Faculty of Medicine, University of Toronto, 1980, in a study entitled *Vision Care: A Survey of Optometrists in Ontario*¹.

This study investigated whether or not optometrists can fill the vision requirements of the “primary care” sector. Primary care was outlined as including all those services provided at the first contact of the individual with the health care system. Secondary care on the other hand, was considered as encompassing those “specialized” and “very specialized” services provided on subsequent (i.e. referred) contacts with the system.

Key factors involved in primary vision or health care were identified as including:

- (1) responsibility for prevention, promotion and maintenance of health
- (2) Complete and continuous care, including referral where required
- (3) consultation, education, diagnosis, treatment and rehabilitation.

This study concluded that the review of optometric services conducted suggested that optometrists met the criteria of primary care practitioners. The members of the Hong Kong Society of Professional Optometrists have been educated to similar levels of professionalism and standards of patient care as their Canadian counterparts. This conclusion would therefore apply equally as well to Optometry in Hong Kong.

The U.S. Government has defined optometric services as primary care ², whereas the services of ophthalmologists are classified as secondary or tertiary care.

The role of optometrists as primary care practitioners is also demonstrated by a number of studies relating to diabetes and glaucoma. Steinmann ³ indicates that optometrists are responsible for detecting most cases of glaucoma and ocular hypertension in Oxfordshire. Similarly, Brittain, Austin and Kelly ⁴ suggest optometrists are more effective diagnosticians of glaucoma than general practitioners. They also state that some general practitioners appear not to have a good understanding of the disease. These authors are ophthalmic surgeons (ophthalmologists).

A study of diabetic retinopathy conducted in the Bristol and Avon region of the United Kingdom ^{5,6,7} has outlined the role that optometrists play in the management of this condition. A recent survey of referral patterns of optometrists ⁸ shows that of 96 patients with ocular signs of diabetes seen by optometrists during the survey period, 42 patients (44%) were not known to be diabetic. Of the 96 patients, 80% had been seen by their general medical practitioner within the previous three months, 90 percent within the previous six months, and 95% in the previous year. These figures indicate that optometrists were responsible for the detection of previously undetected diabetes, even though patients had been previously examined by their physician; and suggest that optometrists may be better equipped by their training and style of practice to detect diabetic ocular signs than are general practitioners.

Optometrists, as the first contact point with health care for many individuals, also provide a screening service for the detection of eye disease and systemic disease. A number of reports indicate the number of referrals made by optometrists to other health care professions, notably to ophthalmology as a secondary care service⁸⁻¹¹. Port⁹, in a survey encompassing nearly 75,000 eye examinations performed by optometrists in the United Kingdom, reports 6% of patients seen were referred to a medical doctor. Port also comments that optometrists are in an unusual position in terms of health screening. Virtually everyone over 45 years of age needs some form of presbyopic correction, and will usually visit an optometrist for this purpose. Ocular and systemic conditions known to affect this age group can be

effectively screened by optometrists during optometrical consultations.

These various studies show that Optometry is fulfilling a role as a primary health care practitioner in the health care delivery systems in other countries, notably the United Kingdom, Australia, Canada, United States and New Zealand.

Optometry is capable of filling the same role within Hong Kong, present and future.

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Primary Visual Health Care

In its submission to the Working Party on Primary Health Care, the Society expressed concern that, under the terms of reference of the Working Party, discussion on visual health care as a component of primary health care would tend to be limited to hospital or institutional based medical eye care, without considering the role of primary care optometrists.

The Working Party's report identifies a number of areas in which aspects of vision care have been included in its recommendations. These areas principally relate to preventative screenings such as those in the proposed Student Health Service ¹, the Comprehensive Observation Scheme², and opportunistic screenings for the elderly attending the General Outpatient Clinics³. Within these recommendations for inclusion of vision tests or screenings, the Working Party has not identified the mechanisms of these screenings.

Other than these areas mentioned above, vision care as a component of health care has largely been neglected by the Working Party in its deliberations.

In relation to visual health care, the primary vision and eye care sector is provided by optometrists. The bulk of Hong Kong's population who seek eye care services will seek them from optometrists. For many, contact with their optometrist will be their first contact with a continuing health care system.

Within this context, secondary care is a resource to primary care. In this sector, health services are provided to those individuals who require more specialized care or investigation than that which is available in the primary sector. Hospital or district health centre ophthalmological services could be considered to fall in this category of health care service. Consulting services provided to optometrists by the Polytechnic's Department of Diagnostic Sciences also form a component of secondary level visual health care in this sense.

The provision of visual health care can be discussed within the context of four areas introduced in the report of the Working Party. These areas are:

- preventative health care and screenings
- the Student Health Service
- occupational health care services
- the District Health Care system.

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Preventative Health Care and Screenings

The report of the Working Party correctly recognises the importance of preventative health care. The Working Party has identified that vision screening is important for certain groups, as indicated previously.

This submission has previously outlined the role of the optometrist as a primary care provider. Optometry possesses appropriate knowledge and skills in the detection of functional vision disorders and ocular and systemic disease in the groups which the Working Party has targeted for health screenings. The role optometry plays in the detection of, for example, diabetes and glaucoma has been previously outlined. A further report¹ has recommended systematic referral of all diabetic patients to optometrists for retinal examination.

Such reports indicate that proper utilisation of appropriately trained practitioners can enhance the delivery and effectiveness of health care.

At present, involvement in both planning and implementation of visual screenings does not involve the input of the optometric profession. The recommendations of the Working Party in relation to vision screenings also does not indicate the role of the primary eye care profession, optometry.

Optometric involvement in vision screenings as primary care practitioners can be

- (a) planning
- (b) implementing and participating
- (c) follow-up - ie as a referral source after the screening.

The latter point has particular relevance at the present time in relation to the screening under the control of the Special Education Section. At present, students who fail this screening are referred to Government Eye Clinics, the Polytechnic, and the General Eye and Vision Clinic of the Society for the Blind. Referrals from the screening are also able to see

ophthalmologists in private practice. Referral to medical eye care in the first instance is not an appropriate use of both primary and secondary level health care services; nor an appropriate use of health care resources, both from the Government's viewpoint and the patient's costs.

These comments relate to optometric involvement in preventative health care initiated by the Government sector. Optometry also has a preventative role in the private sector. The nature of the optometric examination lends itself to screening of ocular and systemic conditions, as suggested by Port². Brown and Hawkins³ have conducted a survey into primary-level preventative health care by optometrists. They indicate that 99% of the optometrists responding perform preventative procedures within their normal optometric practice.

In a report on the economic and professional aspects of disease prevention and health promotion, Marshall⁴ has noted that vision disorders are the second most prevalent chronic health problem in the United States; and as such they should be considered as a major target of preventative and promotive health care. Marshall further states that as the third largest independent health care profession (after medicine and dentistry) optometry, with its record of cost efficient delivery of vision care services, should be an active participant in the development and implementation of programmes for improving, maintaining and protecting the visual health of society. Weiler, Chi and Lubben⁵, in a report of a preventative health care programme for the aged note the most frequently reported chronic conditions affecting the aged. They indicate that visual problems have a 18% frequency, comparing to cardiovascular problems (13%) and hypertension (24%). This indicates visual problems are not an insignificant health problem.

The importance of visual health care as a sector of primary health care is further underlined when ocular morbidity is considered. Perkins⁶ has surveyed morbidity from myopia. This is of particular importance to Hong Kong where the majority of the population seeking eyecare is myopic. Perkins has commented that even low degrees of myopia increase the probability of retinal

detachment and glaucoma. He suggests that myopes of less than five dioptries of myopia have a sevenfold risk of detachment and a threefold risk of glaucoma compared to hyperopes.

If opportunistic screenings are to be introduced as recommended by the Working Party, consideration should be given to extending these screenings beyond life threatening conditions, to include conditions which can threaten the quality of life; using the above as an example.

The Working Party has recommended the establishment of expert groups and advisory committees to identify and implement appropriate screening protocols⁷. The structure and make-up of these groups has not been clearly specified by the Working Party.

The Society hopes that the Department of Health, in its consideration of the report of the Working Party, recognises that optometry is able to offer a significant contribution to the development and implementation of preventative health care screenings.

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The Student Health Service

Whilst being supportive of the Working Party's general recommendations for improvements in the delivery of health care to students as suggested in the proposed Student Health System, the Society feels that there is room for significant improvement in the delivery of visual health care within the proposed Student Health Service.

The importance of vision to learning cannot be underestimated. There is a significant body of literature attesting to visual problems and their relationships to learning and particularly reading performance. The literature regarding refractive error indicates that hyperopia¹⁻⁷ and anisometropia^{6,8,9} are associated with poor reading performance, where myopia^{2-7,10-13} and distance acuity¹⁴⁻¹⁶ are not. The visual screening under the Combined Screening Programme of the Education Department is aimed particularly at detecting myopia and reduced distance acuity, as it assesses visual acuity only¹⁷.

Binocular vision anomalies have also been found to be associated with reading difficulties. Evidence exists to suggest that certain visual difficulties appear to affect the child's ability to read or concentrate on near tasks. Commonly reported anomalies include hyperopia, especially associated with near esophoria^{2,18,19}, poor ocular motor skills¹⁹⁻²¹, sensory fusion anomalies²² and accommodative difficulties^{23,30}. Bedwell and his co-workers¹⁵ have also suggested that maintenance of stable eye coordination can be difficult when the subject is asked to work in a dynamic situation such as reading. Nearpoint exophoria²⁴⁻²⁸ and reduced fusional vergence ranges^{24,25,28-36} have been shown to be associated with reading deficiencies; as has convergence insufficiency^{27,31,50-52}. Getz³⁷ and Solan³⁸ report studies showing improvement in reading comprehension and reading efficiency assessed with eye movement recordings following visual training, suggesting some reciprocal effects between reading processes and clinical visual findings.

Ludlam and Ludlam³⁹ assessed the effect of prism induced accommodative convergence stress on reading in a group of college

students. Their study showed a lower comprehension rate under the conditions of binocular stress. Garzia et al⁴⁰ assessed reading performance in subjects before and during binocular stress. They considered that increased time was necessary to maintain comprehension accuracy, and suggested that the rate of reading comprehension was diminished under binocular stress. These two studies add further weight to the evidence that abnormal binocular functions can affect reading performance.

The current visual screening services to students, as mentioned before, are effectively screening only for myopia and astigmatism (refractive errors which will affect distance acuity), and amblyopia (and hence strabismus). Research has shown that there is a low association of reading difficulties and dyslexia with strabismus⁴¹⁻⁴⁴. In order for visual health care provided to students to be more cost effective and result effective, input from optometry is necessary in the planning stages. The screening failure rate of 5%^{17,45} is low compared to other studies, which give higher failure rates as they screen for binocular defects affecting visual performance as above. Hanks and Chapman⁴⁶ found a screening failure rate of nearly 15% in a group of Australian children, and Wang⁴⁷ has reported a 33% incidence of visual defects in a group of Chinese children. This suggests that a review of the screening process is needed.

The report of the Working Party also indicates that children identified as having learning difficulties by teachers are subject to follow-up assessment by specialist staff of the Special Education Department⁴⁸. To the knowledge of the Society, no optometrist is providing visual assessment to these children, which is surprising given the weight of evidence suggesting association of certain visual defects with reading difficulties.

While the recommended Student Health Service does incorporate aspects of visual health care⁴⁹, it is unclear from the report of the Working Party as to how this visual health care is to be provided in the Regional Health Centres proposed. Comment is made of “ophthalmic” and “refraction” services, but explanation beyond this is not forthcoming. For appropriate use of resources, these services should in the first instance be provided by optometry,

with referral to ophthalmology as a secondary care service when required following optometric examination. This has already been alluded to in the previous chapter on preventative screenings.

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Occupational Health Care Services

The Report of the Working Party has identified occupational health services as an important facet of primary health care¹. The Working Party has described briefly the scope of work of the Occupational Health Division of the Labour Department; and show that the division carries out “medical examinations”. Its screening services for occupational health are aimed primarily at the medical examination of persons exposed to ionizing radiation, users of compressed air breathing apparatus, and government employees employed as divers or pest control workers².

These comments of the Working Party suggest that occupational visual health care is given lesser emphasis than potential life threatening situations. Whilst this is of course realistic, occupational eye injuries are a major cause of lost working days. Figures available from the Federation of Societies for the Prevention of Blindness in Hong Kong show that the number of industrial eye injury cases in Hong Kong have increased threefold between 1984 and 1988; with 2195 cases in 1984 and 6120 cases in 1988.

The most frequent type of ocular injury due to occupational causes in 1988 was corneal injury, either foreign bodies or abrasions; being 76% of all injuries occurring. This type of injury is readily preventable with education and proper use of occupational visual protection.

The Government Ophthalmic Health Education Unit also gives figures indicating the number of cases of loss of vision due to eye injuries. These indicate that the number of cases have risen from 117 in 1984 to 255 in 1987.

These figures suggest that industrial eye injuries are on the increase in Hong Kong, no doubt accompanying the increase in industrial activity.

The recommendations of the Working Party³ in relation to occupational health care services are primarily orientated at improving medical aspects of occupational health care. As expressed in the introduction to this submission, the role of

other health care professionals in providing occupational health care has been overlooked. Optometry has substantial experience and expertise in the provision of occupational visual health care⁴, ranging from the design and prescription of occupational visual protection, to occupational vision screenings and the inspection of workplaces for advice to industry on the preservation and maintenance of visual health in the workplace.

For effective occupational health care, visual health care should be a major component. The use of the appropriately trained primary health care professions in the provision of occupational health care, including visual care, will maximise the use of resources for health care.

The Society considers that, in a review of primary health care, this aspect of preventative health care should be discussed; in conjunction with the Occupational Health Division and the visual health care professions.

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The District Health System

As the cornerstone of its proposals for the redevelopment of primary health care delivery in Hong Kong, the Working Party has proposed the establishment of a district health system¹ incorporating district health centres; and additionally the formation of a Primary Health Care Authority². The Working Party envisages these two agencies as the coordinating agencies for the delivery of primary health care in Hong Kong.

Within this district health system, the Working Party has stressed in its recommendations the use of the health care team, without further specification as to the members of the team; both in the delivery of primary health care, and in the management side of the delivery of health care.

The Society in this submission has pointed out that optometry is able to play a major role in the effective delivery of primary health care. In the context of the district health centre, optometry would be able to make a contribution in a number of ways.

In its submission to the Working Party, the Society indicated that the optometrist could contribute to the health care team within the health centre either:

(a) as a member of the health care team within the centre. This could be either on a full-time or part-time sessional basis

or (b) by the health centre using optometrists in private practice external to the health centre as a resource for the examination of patients, or as a source of patients seen by referral from the optometrist.

Optometry contributing in either of these ways to district health centres would serve to alleviate demand on secondary level medical eye care services by referring for medical eye care only those patients who need it.

The Society also considers that there are two groups within Hong Kong where visual health care is currently neglected. These are the institutionalised and the needy and underprivileged.

Visual health care for the institutionalised (mentally handicapped, physically handicapped, the elderly) should form a part of the review of primary care services. Visual care for these persons should be a part of the health care team in these areas.

A basic foundation of primary health care is that it should be accessible and available to all. Under the current systems of visual health care in Hong Kong, visual care for the needy and underprivileged is not readily available apart from the secondary level in hospitals and government eye clinics.

The Society recommends that the Government develop and institute a subsidised eye care plan involving consultations and the supply of necessary visual aids at the primary level for these groups.

This could form part of the health care service available through the district health centre.

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Conclusions

1. This submission has identified a number of areas in which the profession of optometry can contribute to the future delivery of primary health care in Hong Kong.

The contribution optometry is currently making to health care in Hong Kong is hampered by lack of legal recognition, and preparation for the registration of optometrists has been underway in excess of ten years. This situation is deplorable.

To allow optometry to make its fullest contribution to health care, as it is evidently doing in the health delivery systems of other developed countries, the Health Department and the Government should pursue to their utmost the completion of the registration procedures.

2. The Society recognises the fact that the majority of the contribution of optometry to health care in Hong Kong will be in the private sector. The comments of the Society within this submission have indicated how optometry could contribute to health care delivery within the areas under the scope of the terms of reference of the Working Party on Primary Health Care.

The Society recommends to the Government that, in order to coordinate the planning and implementation of visual health care within the delivery of primary health care in Hong Kong, the Government should consider establishing an Optometry Advisory Unit within the proposed Primary Health Care Authority, or the appropriate authority should this not be formed.

Such an Optometry Advisory Unit would be able to participate as a member of the planning team for, as examples, health care centres, preventative health screenings, the student health service and occupational health; as well as provide optometric services within these areas.

3. The Society considers that, in its deliberations of the report of the Working Party on Primary Health Care, the Department of Health should recognise the role that the non-medical health care professions should properly play in the overall primary health care service. This role has not been fully realised within the context of the deliberations of the Working Party.