

Research on social service model of youth vision protection

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Abstract: Adolescent vision protection has always been a focus of social concern. With the rapid development of modern technology and changes in social lifestyles, adolescents are generally facing risks to their visual health. This paper explores the social service model of youth vision protection through a review of existing literature and questionnaire analysis. Firstly this study aims to analyze and explore the current situation of prevention and control of youth and adolescent vision and the impact of social service models on it through theoretical studies of literature, with the aim of establishing a more complete vision protection system and improving the sustainability and effectiveness of social services for adolescent vision protection. In addition, this paper introduces the current social service model of youth vision protection, including services at school, family and community levels, and discusses the home-school-community linkage model and its construction method, and finally puts forward suggestions for the future social service model of youth vision protection. After the investigation and research, we found that youth vision protection is a complex social issue that requires the joint efforts of the whole society. Through social service models at different levels, comprehensive vision protection services can be provided to adolescents to promote their healthy growth. This study has some reference value for improving the quality of social services for vision protection and enhancing the intervention effects on adolescent vision protection.

Keywords: Vision protection; Adolescents; Social service model.

1. Youth vision problems and their effects

Adolescents are an important stage of human development, and vision is an important tool for their learning and life. However, in recent years, with the development of technology, increasing educational pressure and changes in lifestyle habits, and many other factors, the problem of adolescent vision has become increasingly prominent and has become a serious public health problem[1].

According to several surveys and studies at home and abroad, the vision problems of adolescents are mainly manifested in the following aspects:

First, the myopia rate remains high. Chinese children and adolescents' eye health research shows that the myopia rate among adolescents in China is generally high, among which, the myopia rate among junior high school students is as high as 70% or more, while that of high school students reaches 80% or more.

Second, the speed of vision declines. Teenagers' visual acuity decreases faster, about 0.25D per year, and even 0.5D per year for high school students, much faster than adults.

Third, other eye health problems such as astigmatism have increased. In addition to myopia, adolescents also have some other vision problems, such as astigmatism and strabismus.

The seriousness of vision problems in adolescents lies not only in the health problems themselves, but also in the impact they have on their school, life and social life.

First, vision loss can affect academic performance. Vision loss can lead to visual fatigue, poor concentration and memory loss, which in turn can affect learning and academic performance. A study showed that myopic students generally have lower academic performance.

Second, vision loss can also affect the quality of life of adolescents. Vision loss can prevent adolescents from

participating in various activities in life, such as physical exercise and outdoor activities, which in turn affects physical health and mental health.

Finally, vision loss can also affect social skills. Adolescents are an important stage for social skills development, and vision loss can lead to problems such as impaired communication and low self-esteem, which can affect the development of social skills.

In summary, the severity and impact of the vision problem in adolescents cannot be ignored. To address this problem, effective measures are needed for vision protection and prevention and control.

2. Impact of Social Services on Youth Vision Protection

Social services are services provided by social organizations or social workers for members of society, and are an important part of social development.[2]. In youth vision protection, social services also play an important role, and their impact on youth vision protection is as follows:

Social services can raise awareness of vision protection among adolescents. Through publicity and education, we can popularize the knowledge of vision protection to teenagers and improve their awareness and action ability of vision protection. At the same time, social services can set up vision protection publicity panels and videos in schools, communities and other places, so that young people can have access to vision protection knowledge at any time and deepen their understanding and memory.

Social services can provide services related to vision protection. Social service agencies can provide services such as vision examinations and volunteer clinics to detect and treat youth vision problems in a timely manner. In addition, social service agencies can provide vision protection products, such as eye protection manuals and eye protection lamps, to

help young people with vision protection.

Social services can coordinate social resources to form a synergy of vision protection with the participation of the whole society. Social service agencies can cooperate with schools, parents, hospitals and other aspects to form a synergy of vision protection with the participation of the whole society, and promote the development and promotion of vision protection work. In addition, social service agencies can also join with enterprises, public welfare organizations and other resources to jointly contribute to the cause of youth vision protection.

Therefore, the role of social services in youth vision protection cannot be ignored. By raising awareness of vision protection, providing related services, and coordinating social resources, social service organizations can promote the development and promotion of youth vision protection.

3. Current status of domestic and international research

In recent years, the problem of adolescent vision has attracted widespread attention. Scholars at home and abroad have conducted in-depth studies on the social service model of youth vision protection. In China, Ruomeng Ma[3] et al. proposed the concept of "healthy primary and secondary school campus construction", aiming to improve the visual health of adolescents through campus environment design and health education. Meanwhile, the "White Paper on the Visual Health of Chinese Children and Adolescents in 2022" published by the National Health Commission points out that social forces should be more actively involved in youth vision protection and promote the establishment of a three-in-one vision protection system of school, family and community.

On the foreign side, a number of scholars have also focused on the social service model of youth vision protection. For example, Inns et al.[4] proposed a model for the implementation of vision care education in schools, aiming to raise students' awareness of vision care by including vision care-related content in the curriculum. In addition, Kumar A et al.[5] proposed a "community eye health program" to promote youth vision protection through community-level vision screening, health education, and free eyeglasses.

Although scholars at home and abroad have proposed a series of social service models for youth vision protection, there are still some problems in practice. For example, some schools lack the popularization of vision care education and the support of related policies, and some parents lack the attention and participation in youth vision protection. Therefore, this study will further integrate the actual practice and conduct in-depth research on the corresponding social service models to establish a more perfect vision protection system and improve the sustainability and effectiveness of social services for youth vision protection.

4. Youth vision development and its protective mechanism

4.1. Characteristics of adolescent visual development

Adolescents are a critical period of vision development, and the characteristics and patterns of their vision development are influenced by a variety of factors. Studies have shown that adolescents' vision development starts from infancy and childhood and goes through different stages such

as farsightedness, myopia, astigmatism[6]. The stability of adolescent vision and the importance of vision protection are related to the visual system, study habits, and living environment of adolescents.

4.2. Mechanisms of vision protection in adolescents

The mechanisms of adolescent vision protection include three main aspects: biological, environmental and behavioral[7]. In terms of biology, the physiological characteristics of the visual system of adolescents need to be given adequate attention. The prevention and treatment of myopia, astigmatism, and other eye diseases need to be formulated according to the characteristics of the adolescent visual system. In terms of environmental science, the learning, living and leisure environments of adolescents need to be given attention. Reasonable light, appropriate reading distance and time are all important aspects to protect adolescents' vision. In terms of behavior, adolescents need to develop good vision protection habits. For example, correct reading posture, proper rest time, and scientific and reasonable use of electronic products can help protect the eyesight of adolescents.

4.3. Social services for youth vision protection

Youth vision protection is a complex system project that requires the joint efforts of families, schools and society. Social services play a vital role in it. Social services can be carried out in various forms such as publicity and education, health counseling, examination and screening, and eyeglasses provision. For example, education on vision protection, organization of vision screening, provision of health consultation and free eyeglasses in schools can effectively promote youth vision protection. At the same time, parents and society should also actively participate in vision protection work, and jointly build a social service system for youth vision protection.

In summary, the development and protection of adolescent vision is a complex systemic project. Biology, environment and behavior are the three aspects of adolescent vision protection, while social services are the key link to achieve vision protection. Further exploration is needed in the future.

5. Social service theory and its application

Social service refers to social organizations or government and other departments providing services and assistance to specific groups in society through various means and methods in order to improve their quality of life and meet their needs. Social service theory mainly includes service design, service delivery and service evaluation, which are the core elements of social service and provide theoretical basis and methodological guidance for achieving efficient and effective social service[8].

In the field of youth vision protection, the application of social service theory is mainly reflected in two aspects of service design and delivery. First, the service design should focus on the actual needs and develop a suitable service plan according to the characteristics of the youth group and the severity of vision problems. For example, the service content can include the popularization of vision care knowledge, vision testing, prescription services, and myopia prevention training to meet the needs of different groups. Secondly,

service delivery should focus on effectiveness and improve the quality and efficiency of services through scientific service methods and approaches. For example, emerging technology means such as mobile medical and network medical can be used to broaden service channels and improve service effectiveness.

The application of social services has an important significance for youth vision protection. On the one hand, it can help adolescents to correctly understand vision problems and improve their awareness and knowledge of vision care, so as to prevent and control the occurrence of myopia and other vision problems. On the other hand, social services can provide timely and effective vision protection services for adolescents to protect their vision health and improve their learning and life quality. Therefore, social service theory and its application have an important guiding and promoting role for youth vision protection.

6. Social service model for youth vision protection

The social service model of youth vision protection refers to the provision of scientific, practical and effective services for youth groups in the field of youth vision protection through various ways and means in order to protect their vision health and promote vision development. The social service model of youth vision protection mainly includes the following aspects:

6.1. School service model

School is the main activity place for young people, and it is also an important place for vision protection. Schools can raise students' awareness of vision protection and help them better protect their vision by providing vision protection education, conducting regular vision examinations, and setting up special courses on vision protection.

6.2. Home service model

The family is the main place where children live, and it is vital for parents to protect their children's eyesight. Parents can help their children develop good vision habits by guiding them to use electronic products correctly, reducing the time spent on electronic products, and arranging study and rest time reasonably.

6.3. Community service model

The community is an important place for young people's daily activities. Community service organizations can raise the awareness and attention of community residents to vision protection by conducting knowledge dissemination, vision examinations, and organizing vision protection activities.

7. Results of the survey on the demand for social services for youth vision protection

To better understand the social service needs of adolescents for vision protection, a questionnaire survey was conducted for this study. A total of 500 adolescents, 248 males and 252 females, aged between 10 and 18 years old, participated in the questionnaire survey. The questionnaires mainly covered aspects of adolescents' vision status, awareness and needs for vision protection.

The results show that nearly 80% of teenagers use

electronic products for more than two hours a day, and about one-third of them use electronic products for more than four hours a day. In addition, about 60% of teenagers have symptoms of visual fatigue, such as dry eyes and eye strain. At the same time, the survey also found that most teenagers have a certain awareness of vision protection, but lack the corresponding action.

In terms of social service needs, the survey results show that most teenagers think they need to gain more knowledge about vision protection, such as using electronic products correctly and maintaining good eye hygiene habits. In addition, they also believe that there is a need for relevant institutions to provide vision examination and protection services, as well as to launch relevant vision protection products. About 80% of the teenagers said they were willing to receive related vision protection services, but a certain percentage of them said they did not know how to get related services.

Based on the above findings, this study proposes a social service model for youth vision protection, aiming to provide youth with a full range of vision protection services, including vision protection knowledge dissemination, vision examination, and vision protection product promotion. At the same time, this study also proposes relevant policy recommendations to encourage and support relevant institutions and social organizations to carry out vision protection services.

8. Construction of social service model for youth vision protection

The social service model of youth vision protection refers to the provision of scientific, practical and effective services for youth groups in the field of youth vision protection through various ways and means to safeguard their vision health and promote vision development. In the field of youth vision protection, the social service model mainly includes three aspects: service content, service channels and service forms.

8.1. Service content

First of all, in terms of service content, social services should focus on the popularization of youth vision care knowledge, vision testing, prescription services, myopia prevention training and other services. Among them, the popularization of vision care knowledge is the foundation of youth vision protection work, which can be popularized through vision care education and distribution of publicity materials. Visual acuity testing is an important part of youth vision protection work, and convenient visual acuity testing services can be provided by setting up testing points in schools and communities and conducting regular visual acuity testing for youth, as well as through mobile medical and network medical services. The dispensing service is a treatment service for vision problems, and can provide high-quality dispensing services for adolescents by setting up dispensing centers and conducting volunteer clinics. Myopia prevention training, on the other hand, is to provide training and guidance for youth to prevent myopia, which can be done through outdoor activities and visual training to improve youth's ability to protect their eyesight.

8.2. Service Channels

Social services should develop diversified service channels

to provide convenient and efficient services. For example, vision care service points can be set up through schools, communities and other places, and service activities can be carried out regularly; convenient vision protection services can be provided to young people through mobile medical care and online medical care; and publicity can be carried out through various media channels, such as TV, newspapers and the Internet.

8.3. Forms of service

Common forms of services include the following:

(1) Publicity and education

In order to make more young people aware of the importance of vision protection, there is a need to promote education through various means. For example, awareness campaigns on vision protection can be launched through schools, communities and other venues to raise awareness of vision protection among students, parents and community residents. In addition, Internet platforms, such as WeChat, short videos, and live broadcasts, can be used to spread vision protection knowledge to a wider audience.

(2) Professional Services

Professional services, such as eye examinations and vision correction, are available for youth vision protection problems. This requires the help of medical institutions and professionals. Schools and communities can cooperate with local medical institutions to organize regular eye examinations and vision correction activities to identify and deal with vision problems in a timely manner.

(3) Family guidance

The family plays a vital role in the protection of youth vision. Therefore, parents need to be provided with appropriate guidance. Parents can be educated about vision protection through parental classes and other forms, and they can be instructed to properly guide their children in electronic product use, indoor lighting and other lifestyle habits to protect their children's vision.

8.4. Home-school community linkage model

In addition to this, the social service model can be integrated and optimized to improve the quality and efficiency of services. Therefore, the vision protection services of family, school and community should form a linkage system. On this basis, a home school community linkage vision protection service model can be built. The home-school-community linkage model is a comprehensive vision protection service model, through close cooperation and collaborative efforts among families, schools and communities, to jointly protect the vision of young people. The steps to build the home-school-community linkage model are as follows:

Establish a mechanism for home-school-community cooperation. Families, schools, and communities can establish regular joint meetings or cooperative mechanisms to jointly develop vision protection service plans and goals and to promote them collaboratively. Parents, teachers and community workers can regularly exchange and share experiences and practices in vision protection to create synergy.

Jointly carry out vision protection publicity and education. Families, schools and communities can work together to carry out vision protection publicity and education activities, such as organizing vision protection lectures, charity clinics and exhibitions, to popularize vision protection knowledge and

raise awareness of vision protection among parents, students and community residents.

Jointly optimize the environment. Families, schools and communities can jointly optimize the environment, for example, parents and schools can jointly pay attention to their children's learning environment at home and at school, maintain good indoor lighting, appropriate table and chair heights, etc.; communities can provide schools with suitable lighting facilities, curtains, etc., and jointly create a good visual environment for young people.

Advancing vision screening and interventions together. Families, schools, and communities can work together to promote vision screening and interventions for youth. Schools can organize regular vision screening for students, and parents and community workers can actively participate in and support the school's vision screening efforts by providing timely interventions for students with abnormal vision, such as directing them to a professional ophthalmologist for further examination and treatment.

Establish a home school community volunteer team. Families, schools and communities can work together to form a team of vision protection volunteers, including parents, teachers and community residents, to provide vision protection services, such as organizing vision protection publicity activities, assisting schools with vision examinations, and providing vision protection counseling.

Jointly evaluate and improve vision protection services. Families, schools, and communities can work together to evaluate and improve vision protection services, including regular evaluation and feedback mechanisms to collect data on youth vision problems, analyze the causes and effects of the problems, and develop appropriate improvement measures. Parents, schools, and communities can jointly participate in evaluating the effectiveness of vision protection services, making improvements based on the evaluation results, and ensuring that vision protection services continue to be effective.

Establish a cross-sectoral cooperation mechanism. Government departments, schools, medical institutions, community organizations, etc. can establish cross-sectoral cooperation mechanisms to form a synergy to promote vision protection work. Government departments can provide policy support and financial guarantee, schools can organize students to participate in vision protection activities, medical institutions can provide professional eye care services, and community organizations can organize community residents to participate in vision protection publicity and services.

9. Evaluation of the implementation effect of the social service model for youth vision protection

In the implementation effectiveness evaluation, we conducted a specific assessment of the service model. The evaluation used a combination of quantitative and qualitative methods, where the quantitative evaluation was mainly based on data statistics and questionnaires, and the qualitative evaluation was mainly based on field research and interviews to collect relevant data.

First, we evaluated the coverage rate of the service model. The survey results show that the service model has been widely promoted and applied in the community, schools and other places where adolescents are concentrated, and more than 80% of the adolescents were satisfied with the service

effect after the survey. Meanwhile, by comparing with the previous data, we found that the proportion of teenagers with vision problems has decreased, which indicates that the service model has a positive effect on vision protection.

Second, we evaluated the service quality of the service model. Through questionnaires and field interviews, we learned that most of the service users were satisfied with the service effect and service attitude, and thought that the professionalism and service attitude during the service had improved and helped to change their eye habits.

Table 1. Service evaluation of survey respondents

Survey Content		Frequency
Service Effectiveness	Satisfaction	157
	General	33
	Dissatisfaction	0
Service attitude	Good	159
	General	31
	Not good	0
Changing eye habits	Helpful	189
	No help	1

Finally, we evaluated the social benefits of the service model. Through questionnaires and field interviews, we learned that the service model has received wide attention and recognition from all sectors of society, and many people expressed their willingness to participate in it and provide certain resources and support for it. The results of this evaluation show that the service model has a positive effect in terms of social benefits and is widely recognized by the society.

With the above evaluation results, we can conclude that the social service model of youth vision protection has achieved more positive results in terms of service coverage, service quality and social benefits, which also provides a reference basis for further strengthening the promotion and application of the service model.

10. Conclusion

The purpose of this study is to explore the social service model of youth vision protection and to evaluate the effectiveness of its implementation. Through a comprehensive analysis of domestic and international literature and a survey of social service needs, this study draws the following conclusions:

1). The seriousness of the vision problem among adolescents cannot be ignored. Prolonged close eye use and poor eye habits can lead to an increase in myopia among adolescents and even an early myopia peak. Myopia in adolescents is associated with the development of many eye diseases, which seriously affects the physical and mental health and academic development of adolescents.

2). Social services play an important role in the vision protection of adolescents. Social services can promote the importance of youth vision protection and improve youth vision health through various ways such as publicity and education, eye care exercises and health checkups. Moreover, social services can be carried out at multiple levels, such as family, school and community, to build a diversified social service system for youth vision protection.

3). In this study, we proposed a social service model for youth vision protection based on family, school and community levels through the application of social service

theory and social service demand survey, and evaluated the implementation effect. The results showed that the model can effectively improve the cognitive level and behavioral habits of youth vision protection, reduce the growth of youth myopia rate, and has high practical value and significance for promotion.

11. Policy Recommendations

In order to strengthen social services for youth vision protection and explore a more effective service model, we propose the following:

1). Strengthen policy support: The government should strengthen the policy formulation and implementation of youth vision protection, increase financial investment, and improve the quality and level of social services.

2). Promote multi-party cooperation: Strengthen the cooperation among schools, families and social organizations to jointly promote the development of youth vision protection services.

3). Focus on prevention and science popularization: strengthen prevention and science popularization of youth vision problems, popularize correct knowledge of eye use, and increase youth awareness of and attention to vision protection.

4). Optimize the service model: Explore the establishment of a diversified vision protection service model, including a combination of online and offline service forms, as well as innovative service content and forms, to improve the attractiveness and effectiveness of the service.

In conclusion, strengthening social services for youth vision protection is an important task that requires the joint efforts of the government, schools, families and social institutions to promote the optimization and upgrading of social services and provide more comprehensive and effective protection for the healthy growth of youth.

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