

Discussion on the future nutrition and health service models

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ABSTRACT

With the rapid development of science and technology and growing health awareness, future nutrition and health service models are undergoing transformative changes. Based on the analysis of the current nutrition and health service models, this paper discusses the development trend of the future service models, and proposes a novel framework for future nutrition and health service models based on technological innovation, personalized customization, interdisciplinary integration and community participation and aims to provide theoretical reference for improving the level of public health.

KEYWORDS

future nutrition and health; service models; Technological innovation; Personalized customization; Interdisciplinary integration

1 Introduction

In the 21st century, health has become the focus of people's attention. Nutritional health is an important part of health, and its service models are also constantly evolving. From traditional nutrition consultation to modern precision nutrition, nutrition and health services are developing in a more intelligent, personalized and all-round direction. This paper systematically examines the characteristics, emerging trends, and construction strategies of future nutrition and health service models.

2 Analysis of current nutrition and health service models

Before discussing the future nutrition and health service models, it is necessary to make a comprehensive analysis of the current nutrition and health service models. This session aims to reveal the operation mechanism, main characteristics and challenges of the existing model, and provide a comparison and reference for the subsequent innovation model. The current model mainly includes hospital nutrition department, community nutrition service and nutrition consulting agency service. Although it has met the public's needs to a certain extent, its deficiencies in personalized, intelligent and all-round service have become increasingly prominent, which has become the driving force to promote the reform of the service models.

2.1 Traditional service mode

The traditional nutrition and health service models mainly include the following aspects:

(1) Hospital-Based Nutrition Services. Through the hospital platform, nutrition treatment and guidance services play a crucial role. The nutrition department of the hospital conducts a detailed nutritional assessment of inpatients through a professional dietitian team to develop personalized nutritional treatment plans. These programs not only focus on the patient's diet, but also include nutritional supplements, dietary contraindications, and nutrition education. Dietitians develop patients' dietary regimens according to the patient's illness, physical condition and nutritional needs to ensure that patients receive adequate nutritional support during treatment and promote recovery. At the same time, the nutrition department of the hospital also undertakes the popularization of nutrition knowledge for patients and their families, improving the awareness of the importance of nutrition and health of patients, and establishing healthy eating habits. This service model not only enhances therapeutic outcomes for patients but also constitutes an integral component of holistic healthcare service delivery in modern hospital systems.

(2) Community nutrition service. The community is the cradle of healthy living, and regular nutrition and health talks are organized to let residents understand the importance of a balanced diet; A nutrition desk has been set up to provide personalized dietary advice to residents. These activities not only improve the residents' dietary literacy, but also enhance their health awareness, and jointly build a healthy and harmonious community life.

(3) Nutrition advisory services. With the continuous improvement of people's pursuit of healthy life quality, nutrition consultation has become the focus of individuals and enterprises. Nutrition consulting institutions close to the market demand, are committed to providing a full range of nutrition and health services for individuals and enterprises. It is based on scientific nutrition theory, combined with the individual needs of customers, to provide professional and

accurate nutrition consulting services. Nutrition consulting institutions deliver an integrated health management solution, encompassing nutritional assessment, personalized dietary planning, and evidence-based exercise guidance to address clients' wellness needs. For employees, we can also customize health management programs to improve the overall health level of the team and enhance the competitiveness of the enterprise. In the process of service, we always adhere to the concept of "people-oriented" and pay attention to the health needs of every customer. Through nutrition consulting and health management services, we help individuals reshape a healthy lifestyle and enterprises create a healthy working environment.

2.2 Shortcomings

Although the traditional service models have met the nutritional and health needs of the public to a certain extent, there are still the following deficiencies:

(1) The service content is single, lacking individualization and specificity. With the enhancement of health awareness, the market demand for nutrition and health services is booming. However, at present, many services are single, lack of individuation and pertinence, and it is difficult to meet the diversified health needs of consumers. To mitigate this constraint, the implementation of personalized service models becomes imperative

(2) The form of service is more passive, and the consciousness of active service is insufficient. In the current nutrition and health service market, the service form often presents a passive state, and the service provider's active service consciousness is insufficient, which affects the customer experience. In order to change this situation, it is necessary to integrate the concept of active service into nutrition and health services.

(3) Information dissemination is not smooth, and public awareness of nutrition and health needs to be improved. In the information age, the dissemination of nutrition and health knowledge is facing difficulties, and public understanding and awareness of nutrition and health still need to be improved. This is not only a personal health issue, but also a major public health challenge for society. In order to effectively enhance public awareness of nutrition and health, an information bridge needs to be built.

3 Future trend of nutrition and health service models

With the development of science and technology and the improvement of people's health awareness, the future nutrition and health service models will show a diversified, intelligent and personalized trend. Through the application of big data, artificial intelligence and other technologies, enabling services to become more accurate and efficient in meeting the diversified needs of consumers. Facing the challenges of the new era, the innovation of nutrition and health service models is imperative. The following will discuss the development trend of nutrition and health service models in the future.

3.1 Technological innovation

(1) Digital nutrition and health platforms. With the rapid development of Internet technology, nutrition and health information dissemination and resource sharing ushered in new opportunities. By building a professional nutrition and health platform and integrating online and offline resources, the rapid dissemination of information can be achieved. Users can obtain professional and authoritative nutrition knowledge anytime and anywhere, breaking geographical restrictions, so that more people can benefit. Furthermore, the implementation of standardized data-sharing frameworks enables cross-institutional collaboration, allowing stakeholders to securely exchange de-identified health metrics, thereby accelerating evidence-based advancements in nutritional epidemiology and public health. Internet technology has become an important force to promote the popularization of nutrition and health knowledge.

(2) Big Data analytics. Through analyzing massive health data, it can provide precise nutrition and health recommendations for individuals. With the help of artificial intelligence and big data technology, it is possible to deeply understand the physiological characteristics, living habits and health status of individuals, so as to develop personalized diet plans. These recommendations are not only based on scientific knowledge of nutrition, but can also be adjusted in real time to adapt to individual changes to help people achieve a healthy lifestyle, prevent disease, and improve quality of life.

3.2 Personalized customization

(1) Genetic testing. Understanding your genes is the key to unlocking optimal health. Through genetic testing, the individual's metabolic type and nutrient absorption capacity can be analyzed, which allows for the development of

personalized nutrition and health programs. These programs are not only targeted, but also effective in preventing genetic diseases and improving health. The combination of genetic technology and nutrition allows everyone to find the most suitable for their own healthy lifestyle.

(2) Lifestyle assessment. We provide targeted nutrition advice based on individual living habits.

3.3 Interdisciplinary integration

(1) The combination of nutrition and health, sports, psychology and other fields provides a full range of health services. In achieving a healthy life, nutrition, exercise and psychology are indispensable. Reasonable combination of diet, such as eating more omega-3-rich fish, supplement dietary fiber, to ensure balanced nutrition; Regular aerobic exercise, such as brisk walking or swimming, enhances physical fitness; At the same time, pay attention to mental health, relieve stress through meditation, yoga and other ways to achieve physical and mental harmony. A full range of health services to make life better.

(2) Interdisciplinary personnel training, training nutrition and health service personnel with multi-disciplinary background. Interdisciplinary talent training is the key. The field of nutrition and health services needs interdisciplinary talents, integrating nutrition, sports science, psychology and other knowledge. Through interdisciplinary courses, practical internships, project collaborations, and continuing education, we create well-rounded health professionals who contribute to public health and industry progress.

3.4 Community and family involvement

(1) Community nutrition and health promotion project. By holding nutrition and health knowledge seminars, healthy recipe sharing meetings and other activities, communities can successfully raise the awareness of nutrition and health of residents. The experts popularized health knowledge such as reasonable diet and moderate exercise, and the on-site interaction was warm, and the residents could say that they had gained a lot and would pay more attention to daily diet and healthy lifestyle in the future.

(2) Family nutrition education. The healthy concept of family members should be cultivated from daily diet. Develop a healthy diet together, adhere to moderate exercise, regular physical examination, and share health knowledge. Through Family Health Day activities, we will enhance mutual care and support, and jointly create a harmonious and healthy family atmosphere.

4 Future nutrition and health service models construction

4.1 Construction principle

(1) Human-centered principle. To meet the nutritional and health needs of the public, to provide professional dietary advice and healthy lifestyle guidance. Through profound and simple science popularization, we can help everyone grasp the essentials of scientific diet and reasonable exercise, and improve the overall health level.

(2) Scientific and technological innovation. Relying on scientific and technological advances, significantly improves service efficiency and quality through the introduction of intelligent customer service, data analysis platforms and automated processes. In the case of artificial intelligence, the response time to customer questions has been reduced to seconds, and the precision of personalized service recommendations has been improved, thus enhancing user satisfaction and brand loyalty.

(3) Interdisciplinary integration. To achieve multi-field integration, to provide a full range of health services, covering nutrition consultation, fitness guidance, psychological counseling, disease prevention and other fields. From personalized solution customization to one-stop health management, the professional team is committed to helping users achieve a harmonious development of physical and mental health.

4.2 Future trend of nutrition and health service models reform

(1) Change from a single service to a comprehensive service

With the development of science and technology and the promotion of health awareness, the future nutrition and health services will become comprehensive, covering disease prevention, rehabilitation, health care and so on. Service providers need to have interdisciplinary knowledge, such as nutrition, medicine, psychology, etc., in order to provide personalized and all-round health solutions to meet the diversified needs of users. This shift will push the nutrition and health services industry to a higher level of development.

(2) Shifting from Offline Services to Online-Offline

With the rapid development of the Internet, nutrition and health services are undergoing a transformation of online and offline integration. The online platform provides users with convenient nutrition advice, health assessment and personalized recipe customization, breaking geographical boundaries and benefiting more people. At the same time, offline stores, with their face-to-face communication and professional equipment, can provide more intimate health management services and personalized guidance. This integration model not only enriches the service content, but also improves the user experience and promotes the comprehensive development of the nutrition and health service industry.

(3) Change from passive service to active service

With the innovation of science and technology, nutrition and health service is moving towards a new era of active service. Smart devices and mobile applications will become a good helper of health management, real-time monitoring of user health status, timely push personalized health recommendations and intervention programs. This transformation not only improves service efficiency, but also makes prevention possible, making health management proactive and efficient, and escorting people's healthy lives.

4.3 Conception of future nutrition and health service models

(1) Mode 1: Intelligent health consultant mode

In the future, big data and AI will inject new vitality into nutrition and health services. The Smart Health Advisor model has emerged, and users can enjoy personalized nutrition programs, exercise guidance and health assessments through smart devices or apps. This 24-hour uninterrupted health management model not only improves the efficiency of health management, but also provides a new way for preventive medicine. Smart health advisors will help everyone move towards a healthier future.

(2) Model 2: Community health service center model

Community health service center has become the new focus of nutrition and health service. Residents can enjoy personalized nutrition consultation, health education and chronic disease management services at their doorsteps to strengthen community health functions. This model has narrowed the distance of health management, improved the health literacy of residents, and laid a solid foundation for the health of the whole people.

(3) Mode 3: Telemedicine health mode

With the help of Internet technology, nutrition and health services can break geographical restrictions and realize remote medical consultation. Users can book appointments with experts through the Internet to enjoy remote diagnosis, nutrition guidance and services, especially for office workers living in big cities and rural residents.

(4) Mode 4: Personalized customized health plan mode

Through genetic testing, lifestyle survey and other means, to provide users with tailored nutrition and health programs. Services include personalized diet recommendations, exercise planning and health monitoring to help users achieve their long-term health goals.

(5) Mode 5: Health industry alliance mode

Nutrition and health services will form an industrial chain, involving nutritional food, fitness equipment, health monitoring equipment and other fields. Enterprises, medical institutions, scientific research institutions and other parties cooperate to jointly promote the development of the health industry and provide users with a full range of health solutions.

These five models will give full play to their advantages in the future concept of nutrition and health services, and provide more convenient, professional and personalized services for people's healthy life. With the development of science and technology and the improvement of people's health awareness, these models are expected to become a reality in the near future.

5 Implementation strategy

5.1 Policy support

In order to promote the innovation of nutrition and health service models, it is recommended to formulate relevant policies, support technology research and development and market promotion, foster multi-stakeholder engagement and institutionalize a diversified service delivery ecosystem. Through policy incentives, this approach will guide the service models to develop in the direction of individuation, convenience and wisdom, so as to meet the growing health needs of the people.

5.2 Talent cultivation

In order to improve the level of nutrition and health services, it is urgent to enhance professional training. Professional

courses should be set up to train nutrition and health service talents with professional knowledge and skills. Through school-enterprise cooperation, practice -based construction and other ways to improve the quality of talent training, in order to meet the social demand for high-quality health services.

5.3 Technological innovation

In order to improve the national health level, it is recommended to increase financial investment to support the research and development and innovation of nutrition and health service technology. Through the establishment of special funds, enterprises are encouraged to cooperate with scientific research institutions, accelerate the transformation of scientific and technological achievements, and promote advanced service models, so as to achieve inclusive and efficient nutrition and health services.

6 Conclusion

In the future, the nutrition and health service models are projected to exhibit three defining characteristics: diversification, intelligence, and highly personalized. Through technological innovation, personalized customization, interdisciplinary integration and community participation, the construction of nutrition and health service models in line with future development trends will help improve the level of public health and promote the healthy development of the nutrition and health industry.

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