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COMPREHENSIVE CARE: THE INTEGRAL ROLE OF FAMILY PHYSICIANS IN PATIENT WELL-BEING

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Abstract

With growing concerns regarding health equity, accessibility, and sustainability of health systems, there is a critical need to mobilise a trained health workforce to provide necessary care in low-resourced communities. A possible solution is community-based primary care teams led by family physicians, akin to the “health house” model in Iran and the Family Health Strategy in Brazil. Family physicians provide key aspects of primary care—first contact care, comprehensive care, coordination, and personalisation of care—enabling them to lead community-based primary care teams (P. MF Rahman et al., 2023). Community-based care teams led by family physicians could adequately address health concerns in low-resourced communities while optimally utilising a trained health workforce. To explore the possibilities of family physician-led primary care teams to provide necessary care in low-resourced communities, three patients’ stories are presented who experienced diverse care at community clinics in South India.

Aging causes various health problems in older people that can decrease their quality of life (QOL). Such medical problems cannot be solved solely by healthcare professionals, because they can be connected to psychosocial problems, reinforcing the need for interprofessional collaboration (IPC) (Ohta et al., 2021). Multiple health problems must be approached by various healthcare professionals, each with different knowledge. For example, medical professionals must effectively deal with multimorbidity, and care professionals need skills to

support older people by collaborating with families and social support systems. Medical care must transition from hospitals to clinics and communities, and community care prevent health problems from escalating to a higher care level. Therefore, communities must be able to independently address health problems.

Keywords

Comprehensive care is a growing concern in health care. The World Health Organization declares that "People, right from infancy, should have access to comprehensive health care services…to meet the health needs throughout their lives." In the current climate of health care reform, family physicians can play an integral role in ensuring that patients receive comprehensive care to address their worries, prevent problems, and treat issues as they arise (B Ventres et al., 2024). Central to health, wellness, and disease is the bodily experience of each person. Individuals form a narrative with their bodily experiences, diseases, dysfunctions, or worries. Attention and meaning attached to these bodily experiences determine the trajectory of the narrative. With caring and trained attention, health care professionals may help individuals craft their narratives regarding bodily experiences, disease, dysfunction, and care. Family physicians are trained to consider the whole narrative and can address the experiential, biomedical, and social aspects of a narrative. Without comprehension, care may become fragmented, unwanted, or unwarranted.

Realizing the ideal of comprehensive care requires a health care system that facilitates understanding and upholding the narrative through care. Unfortunately, for many, there is an absence of comprehension; thus, care is neglected or unwanted. For others, care becomes fragmented, uncontrolled, and unmanageable, outside the capacity to comprehend, uphold, and attend to the narrative. Experiential narratives are complex and unique, in flux, and multi-layered. Family medicine emerged as a specialty around a need to regard the whole narrative as far as possible throughout life. Organizations of family medicine help uphold the core principles of regard for the whole narrative throughout life. Care outside this framework becomes uncontrollable or disregarded altogether, and narration and care may become diseased.

1. Introduction

Comprehensive care occurs when a physician accepts responsibility for all the health needs of a patient (B Ventres et al., 2024). As family physicians, there is an interest in the well-being of patients, and this interest extends beyond biological health. A patient is a member of a family, a household, a community, a culture, and a society. Each of these social units significantly informs the context in which a patient's physical and emotional health exists and expresses itself. As such, family physicians feel compelled to practice outside the boundaries of conventionally defined clinical medicine. It remains unclear whether this care is comprehensive. Nevertheless, physicians understand family involvement and collective approaches to be integral to the health and well-being of patients.

The essential role of family in the health and well-being of patients is not uniquely a family medicine concern. Chronic illness can have profound social consequences, and concern for patients generally extends beyond disease. The social implications of sickness are frequently

greater than the biomedical, and care of the sick always implies treatment of the social as well as the physical.

2. The Evolution of Family Medicine

Continuity nourishes the seed that is planted when doctors and patients first meet, allowing healing relationships to grow into something wonderful and unexpected. Family physicians are trained to see and manage a variety of different medical illnesses and conditions over the lifetimes of patients in a variety of settings. This comprehensiveness of care is key to improving care, decreasing healthcare costs and working towards health equity. Comprehensiveness is one of the core principles of primary care, though family physicians typically have a broader scope of practice than other primary care specialties (B Ventres et al., 2024).

Comprehensiveness is associated with greater efficiency, better health outcomes at lower costs, decreased rates of hospitalisations, and better self-reported health outcomes. In the US, compared to other industrialised countries, a higher percentage of care delivered by family medicine is comprehensiveness, which may explain why the US generally fares better on most measures of access to care, and why family medicine training programmes are so sought after. Comprehensiveness is crucial to improving care and health outcomes, lowering costs of treatment, lessening health disparities and decreasing physician burnout.

2.1. Historical Context

The storylines featured in this series capture experiences, observations, and suggestions from family physicians on the New England Board of Family Medicine over the past several years. These early snapshots of family medicine in New England were vividly painted across numerous social and professional contexts and prompted the collection of family medicine storylines from the broader New England family physician community. Well beyond New England, family medicine is unified by a distinct philosophy, principles, and focus. As family medicine celebrates its Golden Anniversary in North America, it is important to reaffirm this philosophy, vision, and commitment to patients and families. History teaches that family medicine must deliberately uphold its foundations, and the tellable stories of family medicine's principles and philosophy can help patients, families, and policymakers understand the worth of the discipline and advocate for it to be preserved and enhanced.

Family medicine as a discipline arose from a convergence of circumstances in the 1960s. In North America, federally funded community health centers aimed to bring health care to underserved populations. A controlling philosophy of open access and comprehensive, contextual, and coordinated care gave rise to a need for generalists. The widening chasm between medicine's high-tech, costly, specialist fiefdoms and the needs of "ordinary" people was brought to public scrutiny by the works of several journalists. Primary care was seen as a countervailing force to specialist dominance and as a means of focusing on health rather than disease. A proliferation of primary care programs and innovations was accompanied by an interest in the philosophy of primary care. What constitutes the worth of a discipline is partially reflected in its philosophy (B Ventres et al., 2024).

2.2. Key Principles

Care is moored in its context. The patient is at the center, a varied and changing universe of hopes and fears, desires and needs, expectations and disappointments, comings and goings. To care for a person is also to care for their family and the other significant people in their lives. In turn, those people and the networks that connect them comprise the fabric of the community, which directly and indirectly influences the well-being of individuals and families. Family physicians are "family-oriented" in that they care for patients in the context of their families and communities (B Ventres et al., 2024). Across time, place, culture, and economic circumstance, family medicine has emerged as a global response to the need for effective, equitable, and population-based approaches to health improvement. The unique contributions made by family physicians to the delivery of health care services are based on the utilization of nine core, or defining, principles: 1. Community orientation 2. Comprehensiveness 3. Continuing relationships 4. Coordinated care 5. Family focus 6. Health systems perspective 7. Holism 8. People first 9. Societal accountability.

3. The Scope of Family Medicine

Continuity nourishes the seed that is planted when doctors and patients first meet, allowing healing relationships to grow. In those relationships, knowledge of the patient informs care, and care informs understanding of the patient. Such relationships call forth what is best in both doctors and patients, allowing them to work together to address and overcome illness, injury, and distress. Family physicians are trained to see and manage a variety of different medical illnesses and conditions over patients' lifetimes in various settings. This comprehensiveness of care is key to improving care, decreasing healthcare costs and working towards health equity (B Ventres et al., 2024).

Comprehensiveness, or the breadth and depth of scope by which family physicians attend to patients' medical problems, is one of the core principles of family medicine. While all family physicians are primary care physicians, and primary care by definition is comprehensive, family physicians (and family medicine) typically have a broader scope of practice than other primary care specialties, such as general internal medicine and general pediatrics. Family's wider comprehensiveness of care is supported by a greater diversity of training experiences during residency, in particular through training in procedures, obstetrics, and care of the newborn, along with the option for rural training. Comprehensiveness is associated with numerous benefits, including greater efficiency, better health outcomes provided at lower costs, decreased rates of hospitalisations, and better self-reported health outcomes by patients. Comprehensiveness has been found to decrease health disparities, particularly among lower income populations, and to decrease physician burnout. Comprehensiveness of training is associated with a wider scope of practice, and a wider scope of practice is protective of burnout. Family medicine has the most comprehensive training of any specialty and is the only specialty trained to provide the most comprehensive care regardless of geography or patient demographic.

3.1. Primary Care vs. Specialty Care

Family medicine is a specialty rooted in primary care. It is important to clarify the distinction and interplay between primary care and specialty care. Consider a patient who has just been

diagnosed with hypertension or high blood pressure. The patient's first stop in the healthcare system is typically a primary care setting, where they expect to receive suggestions for lifestyle changes, education about the risks of not treating the condition, and perhaps a prescription for a medication to start taking daily. This patient may also expect to return to the same healthcare provider after a few weeks for a follow-up visit. This scenario highlights a key characteristic of primary care: the goal of primary care is to establish continuity in care for a specific medical concern, in this case hypertension.

Specialty care, on the other hand, is often characterised by a lack of continuity. If the patient were to follow the route of specialty care in the healthcare system, they would likely see a specialist in cardiology related to their hypertension diagnosis. The patient's encounter with the cardiologist would almost certainly be a one-time visit, with the cardiologist offering suggestions for care that the primary care provider would then implement. At the cardiology visit, perhaps the patient would undergo an echocardiogram to assess heart function or perhaps a stress test to assess blood flow to the heart. These diagnostic tests would still require the patient to go to a different part of the healthcare building or even a different facility altogether, reflecting another characteristic of specialty care: it is often decentralised and fragmented (B Ventres et al., 2024).

A third consideration related to care for this patient with hypertension is the potential need for laboratory testing. A specialist may order laboratory tests, such as a lipid panel or basic metabolic panel. If these tests were ordered in a specialty setting, the care would be even more fragmented because the patient would go to a laboratory outside the specialty practice. On the other hand, if the test was ordered in a primary care setting, the patient would still go to a different part of the healthcare building for the test. In this case, laboratory testing is another example of the decentralisation of specialty care, as patients often have to travel to a different facility for the tests requested by specialists.

3.2. Preventive Medicine

An important principle of family medicine is the view of health as more than the absence of disease and the ongoing search for wellness (B Ventres et al., 2024). Family physicians support patients in their wider efforts to stay healthy and cope with adversity. There are myriad examples: supporting a patient with cancer in achieving a goal of travelling to New Zealand to attend their child's wedding; encouraging a 55-year-old patient to pursue a different job when work becomes too physically demanding due to post-surgical restrictions on lifting; being present for a patient's family during an unexpected cardiac event and subsequent death to help them through the process of making decisions regarding end-of-life care; suggesting a patient who has immigrated from Myanmar and has traumatised children connect with support through the local refugee centre; listening to patients' hopes and fears; conducting thoughtful, age-appropriate advance care planning discussions with patients and their families; and assuring those with chronic psychiatric illness that care will continue, regardless of where life takes them. Family physicians cannot comprehend what wellness means for any particular patient, only that each has their own story and perspective. Family physicians gently accompany each patient through the joys and tribulations of life, supporting them through successes and failures, as well as providing care during acute and chronic illness.

4. The Biopsychosocial Model in Family Medicine

Family medicine is a specialty that provides comprehensive health care to people of all ages, genders, and health issues. Family physicians address a plethora of health issues using professional skills and a biopsychosocial approach. Biopsychosocial is an integrated view of health and disease incorporating biological, psychological and sociocultural dimensions. This model is pivotal to family medicine and services that transmit family physician values. Family physicians believed that health is a biopsychosocial phenomena and the cause of health issues should be sought within these three dimensions. Family physicians found that each epistemology has a strength that the other epistemologies do not possess. When used together, the result is a comprehensive approach. Family physicians believed that knowledge and understanding is best conveyed through narrative and that with each narrative there is a moral. Family medicine services should respect and convey family physician values either through explicit narrative or by shaping the context in which the services are delivered (Kusnanto et al., 2018).

Issues in the biopsychosocial approach concern the interpretation of the model (Williams et al., 2008). Family physicians perceived the model as either a critique of the biomedical model or as a description of health issues. In developing countries, health issues are primarily believed to be biomedical dysfunctions. Biopsychosocial health issues are considered to have pathologies outside these dimensions. With this premise, the biopsychosocial model cannot be used to discuss the inadequacies of the biomedical model. Despite the difficulties in interpreting the model, family physicians believed that such issues should be tackled in the discourse. That would be a good start in popularising the biopsychosocial model in primary care.

4.1. Biological Factors

Biology is the lens through which many diseases are viewed. In recent decades, advances in molecular biology, genetics, and neuroscience have led to an ever-broader understanding of the biological basis of disease and illness, including, for example, psychoses, depression, and anxiety. Family physicians perceive biological factors as potentially important influences on patient well-being, and they share with patients and family members a knowledge of biological influences on illness. Family physicians are also involved with the treatments of biological approaches, particularly pharmacologic treatments (B Ventres et al., 2024).

Family physicians sometimes focus on biological factors when assessing why a patient might not be coping well with illness. This focus might lead to a consideration of dietary changes, exercise, or adjustments in medications. Biological factors can also be focused on patients, particularly when family physicians view patients as presenting with more complex problems requiring a more comprehensive understanding of biological factors. Numerous examples of patients and family members presenting well-being stories that centre on biological factors are identified.

4.2. Psychological Factors

Psychological factors encompassing myriad considerations surrounding patient experience, understanding, perception, and other aspects influence clinical decision-making and treatment.

Health professionals, particularly non-mental health practitioners, face significant and daunting challenges in dealing with patients with psychological problems or unique psycho-physiological conditions symptomatic of chronic diseases. These conditions encompass denial, depression, anger, and anxiety or panic that bound beyond clinical reality as the patient's inner world cycles through a ceaseless tug-of-war with reality (Amutio Careaga et al., 2017). General clinical reality frames outside parameters containing the whirling inner worlds of patients and shaping translatable manoeuvrings executed by health professionals during interactions, evaluations, diagnoses, treatments, or suggestions. Maintaining compassion and understanding in clinical tactics while mastering comprehensive care plays an essential role in health professionals' ongoing education to nurture character and uphold the tenets of professionalism, ethics, and empathy (R. Toukhsati & L. Hare, 2016).

4.3. Social Factors

The influence of social factors on health behavior and outcomes has been widely examined since the 1970s. Social context is essential for understanding health behavior and outcomes at various levels, from macro (cultural values) to micro (personal relationships). Concepts such as social support, social capital, and social networks are often used to understand how social forces shape health-related behavior and outcomes (Ohta et al., 2023). Social factors go beyond individual-level factors, building on and interacting with contextual factors. The persistent rural-urban health disadvantage gradient in Japan highlights the role of social context in shaping health-related behavior and outcomes. Community response to social factors is crucial for understanding health behavior intervention. Family physicians often face difficulties in disseminating health behavior interventions and establishing community responses. Dealing with social factors is complex, but the lack of community responses to social factors presents a crucial opportunity for family physicians to enhance their involvement in community care. The need to consider the community level in health behavior interventions is well documented. Integrating family physicians into rural community care could be an opportunity to promote community responses to social factors in health behavior and a challenge to avoid losing the social dimension in interventions.

5. Chronic Disease Management in Family Medicine

As first-contact physicians, family physicians play a major role in assessing and managing patient's health. The opportunity to think about patient's health in a comprehensive way is a huge privilege and is what makes family medicine unique and special. With the right expertise, knowledge and confidence, family physicians can significantly improve patient's health and well-being. At the same time, systems that support family physicians and the care they provide must also continue to improve and evolve.

In the past, chronic diseases were perceived as 'managed' by teams through protocols. It is now recognized that management of health, well-being and the complex interplay of physical, mental, social and spiritual issues requires a physician-led team whose job is to understand a person's health issues in their context and then tailor care accordingly. It is far more than simply following a protocol, but protocols can help with aspects of care (Murray Cramm & Petra Nieboer, 2016). There are local, community factors which must be taken into account, such as access to services, the impact on family and work, the cultural context and many others, some

of which the patient themselves may not fully appreciate. Family physicians generally have a much clearer picture and understanding of the local community's context, services, resources and challenges than physicians or providers who are based in a more centralized or hospital setting.

Furthermore, family physicians often have long-standing relationships and trust with their patients, which helps patients feel comfortable disclosing sensitive issues and factors outside strictly clinical considerations that impact on their health care. It has been observed that successful systems for chronic disease management usually have family physicians at their centre, co-ordinating care for their patients (P. MF Rahman et al., 2023). Ultimately, an approach that considers the whole person, individual circumstances, their community and their family, both clinically and in social terms, works best. Family medicine is about comprehensive care, for individuals and populations, taking all factors into consideration, and often 'thinking outside the box' to explore different avenues for care and support. For chronic diseases, it is important to understand how comprehensive care can impact on outcomes and processes, particularly for the most vulnerable populations.

5.1. Hypertension

Hypertension is the most prevalent chronic disease that afflicts the largest number of people across the world. As a global public health priority, it is suggested to develop population-level strategies that could enhance awareness, treatment and control of hypertension (J. O'Donnell et al., 2016). Family physicians have a crucial role in the nation's efforts to transform a health care system that provides care for individuals into one that addresses the needs of the whole patient population. Family physicians take the lead in shaping the systems within which care is organized and delivered, as well as ensuring that their patients are able to access needed services and supporting the performance of other providers in the system. A significant source of a family physician's power in this transformation is their ability to take an epidemiological approach to understanding the health care needs of their patient populations.

Management of a population's health involves understanding how the population is distributed across health states and within social groupings that affect health and health care, such as age, gender, location and socio-economic status. The care of particular individuals is informed by an understanding of how their circumstances place them at risk of health deterioration and considering the impacts of previous care interventions and emerging risks. Health states are more commonly represented using hierarchies that depict the severity of different health conditions, with particular reference to the need for active care. Hypertension illustrates strengths and limitations of existing hierarchies. Important to the care of individuals with hypertension is understanding how it is situated within a classification of chronic disease. Hypertension is also the exemplar through which issues of data time-frame are explored.

5.2. Diabetes

63 million people have diabetes in India, and another 77 million are at risk. Family physicians can help to strengthen families living with diabetes by adopting the 'Five-I' approach: identify, inform, involve, impact, and improve. The family must be the focus of attention for the future of diabetes management (Kalra et al., 2019). Healthy living with diabetes is not possible

without the cooperation and involvement of family members. To assist persons with diabetes in their day-to-day living, families make significant adjustments to their lifestyle. Family members of persons with diabetes are at high risk of developing biomedical and psychological illness. Therefore, the health of family members must be optimized for them to function properly. A change is needed in the way diabetes care professionals view their responsibility. They must move from a person-centric to a family-centric model of care.

5.3. Asthma

Asthma is a chronic respiratory disease affecting over 300 million individuals globally and causing around 500,000 deaths each year (B. Bridgeman & A. Wilken, 2021). It is characterized by chronic airway inflammation, bronchial hyperresponsiveness, and reversible airflow obstruction. Although several pharmacological treatments are approved, asthma control is frequently inadequate. Inhaled corticosteroids, the most effective anti-inflammatory asthma medications, are underused despite being the recommended add-on therapy for patients experiencing uncontrolled asthma. Adherence to medications is crucial for optimal asthma control, but over 50% of patients with asthma are nonadherent with their medications, resulting in poor asthma control to severe exacerbations. Poorly controlled asthma presents significant economic burdens on patients and caregivers, with a considerable increase in missed school and workdays. Asthma is often under-treated in children even with available resources. Many patient-related issues, including poor perception of asthma severity and control, influence asthma care.

Family physicians provide comprehensive care for chronic diseases, including asthma, and are readily accessible to patients. They can manage asthma with or without collaboration from other health care professionals. Despite the known benefits of non-physician health care providers in the management of asthma, the roles and perceived barriers of family physicians in the management of asthma in children have not been thoroughly studied. Understanding family physicians' roles in asthma management is crucial, particularly during and after the COVID-19 pandemic. This study aims to assess the roles of family physicians in the management of childhood asthma and identify perceived barriers.

6. Pediatric Care in Family Medicine

Most childhood illnesses and injuries are managed entirely within family practice. For the rare circumstances that require subspecialty care, family physicians are able to understand the subspecialty's contribution to the child's care, thereby helping the family negotiate that complex system (B Ventres et al., 2024). Family physicians have the unique perspective of understanding what families are going through, the stresses involved, what services are being used, and how to advocate cogently for what is needed or how to effect change. A significant number of family physicians who see children do so from birth, accepting the family’s newborn into their practice and providing well-child care throughout childhood. Family well care and child well care are thus provided by the same physician in the same setting. This enhances the delivery of preventive care and developmental screening. Here, it is discussed the nature of pediatric care in family practice and how it differs in important ways from pediatric subspecialty care. These differences are shaped not only by training and experience, but also by the philosophies of the two disciplines.

6.1. Growth and Development

Family physicians, or family doctors are trained to provide comprehensive and continuing care to individuals and families. Despite the growing evidence regarding the effectiveness of family physicians and the increasing demand for them, there is a trend in the opposite direction in many countries. Recently, the medical graduates at the end of their training in family medicine were asked to reflect on their growth and development as family physicians. Participants in the education programme expressed their thoughts in a written essay and the results, presented here in a de-identified format, are intended to encourage thoughts on the future role of family physicians (P. MF Rahman et al., 2023).

The future of health care delivery directly impacts the future role of family physicians. The rapid changes in health care delivery systems challenge family physicians with a variety of questions. A few sample questions include: How does one plan to allocate time in the future between clinical practice, education, administration, and research? How does one see the balance between time spent in health care systems in lower middle income countries and those in high income countries? What does one see as values and beliefs of family physicians and how would one wish to see those in practice over the next 10 years? How has the thought of being a family physician grown over time and how does one see this evolving over the next 10 years? What would one like to see as the legacy for the future generations of family physicians?

6.2. Immunizations

Pediatric and adolescent immunizations are a cornerstone of preventive care for family physicians. In addition to an overview of the immunizations currently recommended for children and adolescents, family physicians' role in the development and delivery of new vaccines is emphasized (D. Boston & J. Bryan, 2018). Children and adolescents are the focus of this discussion on immunizations, but family physicians also care for adults for whom a number of different immunizations are recommended. Vaccination is regarded as one of the greatest public health achievements of the 20th century. High vaccination rates have virtually eliminated some diseases and significantly decreased the incidence of others. Mumps and rubella, for example, were endemic in the US prior to the introduction of the vaccines. Each year, thousands of children were hospitalized and many severely affected or died. Following the introduction of effective vaccines, mumps and rubella disappeared from the national landscape (Page et al., 2002). Vaccination against these diseases must be maintained, as it is the only means of preventing them from re-establishing themselves in the population.

7. Geriatric Care in Family Medicine

A 73-year-old widowed male was brought in for evaluation at the request of his daughter. She noted significant changes in his functioning after the death of his wife two months prior. He had become withdrawn and was no longer able to manage his medications or finances, which had previously been under his control. A few weeks prior to coming in for evaluation, the patient had been admitted to a hospital due to a fall and was found to have a subdural hematoma. At the time of the hospital admission, he was noted to have significant cognitive impairment and was unable provide a history. A CT of the head was done, which was read as showing chronic subdural hematoma, and he underwent burr-hole placement. After the procedure, he was noted to be "demented" with mild-to-moderate cognitive impairment,

although the daughter felt he was markedly more impaired than was being reported by the staff (B Ventres et al., 2024).

At a follow-up visit to the family medicine clinic, the daughter reported that her father was still "placid," but she was concerned about increasing anger and agitation. He had recently begun hitting the staff at the assisted living facility where he had been placed. The events surrounding his fall, head injury, and subsequent development of cognitive decline were unclear. The daughter described her father as a very active man prior to the fall. He enjoyed golfing and was independent in all activities of daily living. A week prior to the fall, he had a "tricycle" stroke and was briefly hospitalized. At that time, she noted his cognitive changes starting and that he was no longer able to care for himself at home. On review of the medical records, the daughter had steadfastly advocated for her father, questioning the care he received during his hospital admission.

This case illustrates the importance of careful history-taking and the need to consider the non-obvious in clinical decision-making. It highlights the surprising prevalence of chronic subdural hematomas in older adults and the need for a higher index of suspicion when they present with newly-developing cognitive impairment. It is important, too, to focus on a single system when pursuing differential diagnoses and to remember that often the simplest and most common explanation is the most likely. In family medicine, caring for older adults means knowing the core values of family medicine, such as the importance of community and the family, the biopsychosocial model, and a commitment to comprehensive care. However, it is not enough to just know the values; it is important to show how they are applied in practice.

7.1. Polypharmacy

Homebound patients are likely to have multiple chronic medical conditions and thus take many medications. Medications in this patient population can improve quality of life and function, but caution must be exercised when prescribing (Atkinson Cook et al., 2022). Patients receiving home-based primary care services often do not engage with many specialty physicians, so the responsibility of managing a patient's medication list falls to the home-based primary-care team. Taking the time to perform a medication reconciliation in person is essential. Being in the home allows providers to see where medications are stored, how they are administered, and who is involved in the process. This visibility allows for immediate identification of unnecessary medications or those that may harm the patient and suggestions for their elimination. Moreover, it is critical to educate both the patient and caregiver around medication safety.

Home-based primary-care providers can align with home health nurses because the latter routinely assess and document medications. Collaboration helps to address polypharmacy in homebound patients. Routine medication reconciliation is typically conducted by home-care nurses when a need for skilled nursing service is identified. This visit presents an opportunity to discuss medications, assess how well the patient is managing them, and educate them about safety and side effects. Research shows that in-home medication reconciliation by home-care nurses may facilitate deprescribing and improve communication with primary-care providers. Polypharmacy in homebound patients can be addressed by home-health nurses through routine medication reconciliation. However, effective communication between home health nurses

and home-based primary-care teams is needed to properly address polypharmacy and its negative effects on health.

Patients living at home with chronic health problems are often prescribed many medications or polypharmacy. Polypharmacy is concerning due to health risks like falls, discharge confusion, hospitalization, and death. Hospitalization often adds more medications, increasing this dilemma. Unfortunately, attempts to reduce medications (deprescribing) often fail. Implementing a team approach to concordant deprescribing during hospitalization improved knowledge, policy, and processes for long-term care. A study protocol to evaluate this approach's feasibility and effectiveness in reducing hospital medications is presented. Primary care, pharmacy, and home health aides will assess medications, considering patient preference, and develop a care plan, including tardive discontinuation of relevant medications. EHR-supported deprescribing will be documented in a home care plan (Famuyiro et al., 2023).

7.2. End-of-Life Care

The family physician is, from the outset, in a key position to play an important role in end-of-life care. Family physicians often accompany families for years and are integral players in the network of care providers. The family physician usually knows the family, the relatives, the social context, the partners in care and the expectations that are there (J Barnard, 2004). This enables the family physician to see loss as a family process, rather than solely as an individual experience. That vision is essential, especially in situations where the loss of one family member inevitably means the loss of a life and care context for the rest of the family.

However, in recent years, family physicians have spent less time on this aspect of care. On the one hand, it must be noted that good end-of-life care demands a great deal of care and attention. It requires family physicians to make choices, sometimes painful choices, between the many requests for home care. On the other hand, society as a whole has made a choice in recent decades: care has been organized differently, attention has been focused elsewhere and other professionals have stepped into the breach. In this changing context, how do family physicians view their own involvement in end-of-life care? What specifically do they feel they (should) provide? What do they see as a burden and what as an enrichment? These are the central questions addressed in this chapter.

8. Mental Health in Family Medicine

Family physicians play an essential role in managing mental health within their communities, treating a broad spectrum of cases from anxiety to psychosis. They are often the first point of contact for those experiencing mental health issues and provide ongoing care during treatment. Moreover, most people with mental health issues prefer to seek help from family physicians rather than psychiatrists, psychologists, or other mental health professionals (Noonan et al., 2018). Unfortunately, a significant number of family physician consultations related to mental health problems go unrecognized and untreated, usually because they do not meet the criteria for diagnosis in the selected classification system. Despite this, family physicians still provide various treatments, particularly support, but the outcome is often poor. In most cases, no follow-up is conducted after a consultation for a mental health issue.

The pressure to meet time-related obligations in other areas of care often overshadows mental health consultations. Patients with physical health conditions often dominate the agenda, and other discussions are quickly closed due to time constraints, even if the patient takes the initiative to speak about their mental health (Thomas et al., 2016). Some family physicians believe that mental health issues should be dealt with within a community and by other professionals instead of being discussed and treated in a clinical setting. They prefer to refer patients to specialists when mental health problems are suspected, even if this is based on their own understanding of the symptoms rather than the patient's explanation. A multidisciplinary team that includes a mental health professional may encourage more open and adequate handling of mental health issues, as well as referring patients to psychosocial care. However, many family physicians work alone, which can drive them to externalize mental health and avoid dealing with it personally.

8.1. Depression

Comprehensive Care: The Integral Role of Family Physicians in Patient Well-Being

8.1. Depression Mental health is inextricably linked to overall health, and it has been recognized that primary care providers play a key role in the diagnosis and management of mental health disorders, particularly in rural areas. Physicians often manage patients with anxiety and/or depression on their own, as there are too few mental health specialists. Moreover, patients prefer to discuss these issues with their family physician, which makes their role even more important (Lauria-Horner et al., 2018).

Family medicine is rooted in and flourishes best in community settings where its values, including the provision of mental health care, can be fully realized. As the first point of contact in the health system, family physicians provide comprehensive and continuous care to individuals, families, and communities, many of whom experience mental health issues. Family physicians care for approximately 90% of individuals with mental health issues in the community. Awareness of the impact of mental health on overall health – the "missing link" in the health system – is therefore essential for family physicians. Family physicians are disciples of integration due to their training and practice paradigm, which encompasses a holistic approach to health care (M. McGough et al., 2016).

8.2. Anxiety Disorders

Anxiety disorders are the most common mental illnesses in the United States, affecting 40 million adults in the United States age 18 and older. These disorders are highly treatable, yet only one-third of those suffering receive treatment. The lifetime prevalence of any anxiety disorder is 19.1%. The point prevalence of any anxiety disorder is 12.5%. The 12-month prevalence of generalized anxiety disorder is 3.1% (Sakurai et al., 2023). Approximately 60-90% of patients with anxiety disorders present with comorbid medical disorders.

In primary care, 23.6% of the patients have anxiety disorders according to ICD-10 criteria. Patients with anxiety disorders more frequently utilized primary care for their psychosomatic symptoms, chronic illnesses, or multiple complaints (Sapra et al., 2020). For these patients, general practitioners (GPs) play a crucial role, screening them because they are concerned about the physical symptoms, referring them, or treating them. However, anxiety disorder may

go unnoticed or misdiagnosed in one in three patients in primary care settings. This may be due to patients focusing on their somatic symptoms, reluctance to talk about their mental health issues, or even GPs focusing on the somatic complaints. Therefore, the need for clear clinical practice guidelines in primary care for this anxiety disorder is essential.

9. Patient-Centered Care

A patient-centered or person-centered care system is composed of patients' rights and responsibilities, access to information, access to care, involvement in decision making, confidentiality, and respect and non-discrimination. In a patient-centered care system, patients have the right to receive respectful care that considers their social, cultural, spiritual, and personal values. Every healthcare organization should have an explicit code of ethics to ensure that patients' rights are respected and promoted (Kumar & Kumar Chattu, 2018). Healthcare organizations, providers, and patients all play important roles in fostering a patient-centered care system. A family physician can effectively facilitate a patient-centered care system by ensuring access to care, preserving continuity, and promoting strong personal relationships between patients and family physicians. Family physicians bring their patients into the center of care in 4 different ways: by being the first point of contact for patients seeking care, providing care across the continuum of life, ensuring cost-effective care, and addressing patients' health in a holistic manner. Family physicians ensure the accessibility of care to patients by eliminating barriers to care. In a healthcare system with a well-distributed network of family physicians, patients should have a family physician assigned to them, unlike in a highly privatized healthcare system where family physician services are provided only on demand. The patients should be provisioned to care from their family physician rather than elsewhere whenever possible. In a system with a gatekeeping model, family physicians act as gatekeepers to the healthcare system. Patients seeking care for something that may require specialty care or hospitalization should first consult their family physicians, who determine whether the case should be referred (C. Stange et al., 2010). Family physicians preserve continuity in care by minimizing the number of changes in family physicians that patients have. When patients have different family physicians over time, or when patients have no personal family physician, care becomes fragmented. Changes in family physicians often occur due to patient attitudes, provider attitudes, system barriers, or external factors.

9.1. Shared Decision-Making

Holistic health care, or the involvement of family physicians in the well-being of relatives and caregiving patients, is described. A mother diagnosed with a rare complex disease involving intellectual disability and intractable epilepsy met the requirements for a comprehensive family practice. Research was conducted to record this real-world occurrence of participatory medicine through collaborative decision-making in its purest form. The choice of mainly online health management was made to accommodate the family's geographic distribution. It was found that to co-manage positive health, all family members must actively participate and support each other in developing the ability to adapt to the challenges of life with disease.

Currently, health care is a balance between the patient's preferred level of involvement in decision-making and the health care provider's style. In family medicine, the patient's family participatory team becomes the new decision-maker, necessitating an adjustment to the health

care provider's role and style. Bringing diseased family members to a health care provider may lead to their dependence on care. However, involvement in health care helps families grow and improve their ability to manage disease-related challenges (Poduri et al., 2020). Thus, health care providers must recognize that healthy relatives may play an active role in co-managing the patient's health, regardless of the patient's independence level.

To foster health care participation, consideration must be given to the family unit's geography, the family's cumulative capacity to manage health, and the family's conceptualization of health (P. Tamirisa et al., 2017). That is, as families often require assistance in co-managing the health of one relative, health care should begin with the whole family before focusing on the diseased individual.

9.2. Cultural Competence

Cultural competence, or understanding patients' backgrounds and beliefs, can greatly improve patient care. Even questions that seem simple and straightforward can have very different answers depending on culture. Family physicians can greatly improve patient care by being aware and knowledgeable of cultural factors (Blonigen-Heinen & Basol, 2015).

Cultural factors include country of origin, preferred language, communication style, views of health, family and friend involvement, religion, food preferences, and many more. Treating every patient as an individual is critical in providing care. A patient's cultural background may affect their views on health, religion, food preferences, and many other factors (Akins, 2009). Taking the time to learn about each patient's culture is essential in being able to provide the best care possible. In developing cultural competencies, it is important to first be aware of cultural factors. Without understanding that a patient's culture will affect their care, making an effort to learn about each individual patient is impossible. Secondly, it is important to take appropriate steps to learn about each patient. Since each culture is different, there needs to be different ways to learn about and treat patients from different backgrounds.

10. The Role of Technology in Family Medicine

Technology will be essential in advancing the importance and integration of family medicine. Video technology, e-visits, asynchronous messaging, remote monitoring, telehealth, and direct-to-consumer care options can provide patients a wide range of care options, improving access and allowing flexibility to fit care into busy schedules. Family medicine accounts for 38% of all office visits, yet only 6% of family medicine is providing care via telehealth, though it saw the largest growth. Many family physicians want to use technology to care for their patients. Given the challenges, desire, and growth, a humbly offered framework with five C's of family medicine's core tenets is proposed: Contextual care, Continuity of care, Access to care, Comprehensive care, and Care coordination. Family medicine has a long history of telemedicine, dating to 1925 when a family doctor used a two-way radio. Family medicine's overarching aim is to nurture health in all patients, encompassing physical, emotional, social, and spiritual well-being. Keeping with the original technology used in telemedicine, the heart of family medicine is in the epistles of Francis of Assisi.

Narratives are part of the telemedicine discussion, beginning with medical groups, hospitals, or providers explaining how telemedicine will help tell the patient experience stories. Narrative

details how telemedicine adoption was urgent due to COVID and how patients welcomed the care mode. Family medicine's desired technology future is defined in numbers. All health systems and family medicine groups significantly increased telehealth or telemedicine visits. Family medicine's aim is to conduct nearly a tenth of visits via telehealth or telemedicine. Ensuring telehealth systems make family medicine's desired technology future possible. Family medicine covenants with patients to provide Contextual care, Continuity of care, Access to care, Comprehensive care, and Care coordination. Storylines of family medicine III discusses the five core principles of family medicine. The principles provide a roadmap to maintain family medicine's values in future telehealth technology. Family medicine is invited to consider the five covenants and principles as a framework for caring for patients in an evolving technology landscape (Cheng et al., 2021).

10.1. Electronic Health Records

The present study suggests that family physicians in rural and smaller practices are particularly important to target with adoption efforts, given that they are significantly less likely to be using such technologies in Florida (Menachemi et al., 2006). This trend is probably attributable to the economies of scale that larger practices have in terms of increased access to financial and human resources. If these barriers are not minimized, we will continue to see disparities in EHR adoption rates between large and small, and rural and urban, practices. Future research is needed to continue monitoring the use of information technologies by family physicians in Florida and other areas of the country. In conclusion, widespread and robust utilization of EHR will be essential. In contrast to experiences of care such as inpatient rounds or ambulatory visits, families do not typically interact with the EHR directly, although this trend is rapidly evolving with the rise of patient portals (M Gabbay et al., 2022). Recent innovations such as OpenNotes have aimed to provide "patient-centered" care and have shown benefits such as increased medication adherence and an improved sense of shared decision making. Other examples of a "patient-centered" EHR include "Age-Friendly Health Systems" and the Veterans Health Administration's "Whole Health Program," both of which incorporate patient goals in the development of care plans. The term "family-centered care" is often used in conjunction or interchangeably with "patient-centered care." Patient-centered care focuses on achieving holistic understanding by incorporating individual patient preferences and values, building relational connections and trust, and supporting patient self-management towards achieving health goals. Family-centered care extends this focus outward to include those individuals who provide support to the patient and with whom the patient has a significant familial relationship. A family-centered approach to the EHR has ample opportunities, such as linking medical records between siblings or members of the household. Each opportunity carries along with their own implications. They explore the opportunities, implications, and challenges of a "family-centered EHR," specifically in relation to the field of Pediatrics within the United States.

10.2. Telemedicine

Telemedicine has been growing over the years, but the COVID-19 pandemic sparked a sudden, rapid adoption. To facilitate social distancing and safety, many family physicians turned to telemedicine to provide care for their patients. Family medicine is well-suited to telemedicine. Increasing access to care through alternative formats is one of family medicine's core values,

and telemedicine broadens access by bringing care directly into patients' homes. Well-structured telemedicine systems can allow family physicians to deliver much of the same services as in-person visits (Cheng et al., 2021).

Family medicine provides contextual care by treating patients in the context of their families and communities. With proper telemedicine processes and training, family medicine providers could use the 5 C's of family medicine in a telemedicine format, and telemedicine would not preclude family medicine providers from providing care in a comprehensive manner. Telemedicine could even enhance the contextual care family medicine provides by facilitating home care interventions. In moments of crisis, family medicine has pivoted before. Family medicine has survived and thrived during pandemics, civil conflicts, and societal upheaval throughout history, and there is hope and potential for family medicine to emerge stronger from the COVID-19 pandemic as well.

11. Interprofessional Collaboration

Comprehensive care, provided as a specialty of family medicine, is essential to achieve an effective and sustainable healthcare system in an aging society. Care professionals need multiple skills to provide comprehensive care, which includes biopsychosocial problem management and collaboration with families and social support systems. Community health systems should enhance citizens' abilities to address health problems using social support and social capital.

In an aging society, diverse health problems must be holistically supported, encompassing not only biomedical aspects but also psychosocial dimensions. Problems that affect quality of life cannot be resolved solely by healthcare professionals. Solutions often necess a change in lifestyle or social supports, reinforcing the need for interprofessional collaboration (IPC). Healthcare professions typically address similar problems and hold a common understanding of health, including biophysical, psychological, and social aspects. However, each profession possesses different knowledge, skills, values, and roles, resulting in fragmented care when multiple health problems must be addressed (L Pott & M Drake, 2016). Therefore, various healthcare professionals must collaborate to approach a multitude of health problems.

In Japan, the current medical situation is concerning, particularly in rural areas. Patients in communities often undergo tests at several hospitals, creating a heavy burden on hospital physicians. Hospitals typically manage complicated, acute, or severe cases, while clinics and communities focus on ongoing, mild, or stable cases. However, in rural areas, care fragmentation occurs when several medical institutions only treat the same complicated, acute, or severe symptoms. This inability to link hospitals with clinics and communities occurs when patients do not accept appropriate medical care from rural community medical institutions (Ohta et al., 2021).

11.1. Team-Based Care

Characterized by continuity, comprehensiveness, and coordination of care, family medicine is the specialist discipline with the broadest outlook on patient well-being, disease prevention, and health promotion. Beyond clinical activities, family physicians' professional commitments also encompass education, research, and advocacy roles. By design, family medicine is

appropriate for reconciling competing desires for universal access, equity in health care, quality of care, and provider accountability. Family physicians are the most accessible primary health care providers for patients and are consequently in the best position to detect the subtle and sometimes distant repercussions of social upheavals, environmental disasters, and health policy changes on individuals' well-being (G. A. Pujalte et al., 2020). Family physicians should therefore proactively advocate for the well-being of their patients, communities, and societies. In their clinical role, family physicians seek to establish and maintain relationships with patients. The resulting patient-centered partnerships are pivotal to addressing patients' biomedical, psychological, social, and existential health concerns in a holistic manner (Liu et al., 2023).

These health issues typically manifest in a complex interplay. Family physicians thus need to coordinate the input and expertise of various health care providers and ensure the integration of different modes of care delivery. A mandate shared with many specialists since the inception of the discipline is the obligation to promote care continuity and comprehensiveness. However, ideally, continuity and comprehensiveness of care would be realized by family physicians in their own practice. Otherwise, the risk becomes that patient well-being is compromised and the care system becomes fragmented as a result of multi-provider intervention. This highlights the family physician's pivotal role in team-based care, which is globally proposed as a strategy to promote quality in health care systems, especially primary health care. An emphasis on teams is also industry-driven reforming health care systems from the perspective of professional providers. Team-based care is perceived as a solution to many predicaments in which professionals find themselves.

11.2. Referral Networks

Referral networks can help family physicians connect their patients with other health care providers and community support services. The access to resource directory at the local health unit resource is a start but more and better connections could help family physicians care more comprehensively. Referrals to psychologists or social workers to treat mental health concerns can be difficult to navigate. Due to long waits aboard, it may be ideal to seek psychologist service through family physicians, but the lack of access to psychologist research has made this option difficult to navigate (N. Tallent, 2011). Referrals to community agencies to address housing, food security, financial stress, or social support also appear to be difficult. Community agencies are aware family physicians may not refer because of the concern patients may not contact the agency without an appointment and because the information provided may not be detailed enough (B. Beidler et al., 2022). Family physicians want to help their patients access community resources but more and better connections need to be in place to achieve this.

12. Global Health and Family Medicine

12. Global Health and Family Medicine Continuity nourishes the seed that is planted when doctors and patients first meet, allowing healing relationships to grow into something wonderful and unexpected. Over the lifetime of patients, family physicians are trained to see and manage a variety of different medical illnesses and conditions in a variety of settings. Comprehensiveness of care is key to improving care, decreasing healthcare costs and working towards health equity (B Ventres et al., 2024). Such breadth and depth of scope by which

family physicians attend to patients' medical problems is called comprehensiveness. Comprehensiveness is one of the core principles of primary care, though family physicians typically have a scope of practice that is broader than other primary care specialties. Family/general medicine specialty training programs in the US, Canada, Australia, New Zealand, the UK, and many European, African and Asian nations require the most extensive training in primary care. Consequently, comprehensiveness is associated with numerous benefits, including greater efficiency with better health outcomes provided at lower costs. Comprehensive care is also associated with decreased rates of hospitalisations and better self-reported health outcomes by patients themselves. Comprehensiveness is crucial to improving care and health outcomes, lowering costs of treatment, lessening health disparities and decreasing physician burnout (Ratanzi & M. Gaede, 2020). Out of all medical specialties, family physicians are trained to provide the most comprehensive care, regardless of geographical location, patient demographic or method of reimbursement for services rendered.

12.1. Health Disparities

Roughly 80 years ago, community leaders in a small corner of Northern Michigan unwittingly initiated what would be a life-long passion for developing and nurturing family medicine residency training programs. Even though these rural, frontier communities had never seen a physician, much less a family physician, they banded together to build a hospital and a compelling case for a family physician to care for their community. They understood that access to healthcare was essential for optimal health and that, in the absence a healthcare provider, there was an opportunity for preventable illnesses to accelerate death and suffering, particularly amongst young children. Guided by their values and resources, they sought someone who would care for the whole community over their entire lives (B Ventres et al., 2024).

Unfortunately, today's healthcare system is ill-equipped to meet such needs. In part this is due to a misunderstanding of "access." Access to healthcare services is commonly thought of in terms of supply-side factors such as availability and affordability of medical services. Access is far more complex and nuanced, incorporating individual and community characteristics and values, cultural aspects, social norms, systems thinking, trust, ethics, policy, geography, service literacy, health literacy and many other factors. Family physicians improve access to care by providing community-based, continuity-oriented medical services in the context of individuals' values, family systems and communities. Community-based care improves access by bringing services to individuals in the context of their values, culture and lives, thereby promoting trust, accountability, participation and respect.

12.2. Humanitarian Aid

Exposure to different cultures broadens the horizons of care providers and facilitates social conscience. A mission study in Paraguay, where holistic care is provided to indigenous people, as well as other experiences in field hospitals, refugee camps and care centres in wilderness settings, provide invaluable opportunities for family physicians and residents. This paper highlights some formative experiences from a decade of involvement in humanitarian aid, encouraging others to engage with their local communities or explore humanitarian work abroad.

Family physicians and residents involved in humanitarian work share a sense of rejuvenation and moral strengthening. Involvement in healthcare for disadvantaged and vulnerable people broadens the horizons of care providers and has a ripple effect on their work in other contexts. Exposure to different cultures as well as care environments, ranging from comfortable clinics to field tents and catering from nothing to complex care, challenges care providers and encourages them to reflect on the basics of their profession. Humbling encounters with people experiencing extreme adversity and still managing to cope forms social conscience and caregiving beyond the professional "job description" (B Ventres et al., 2024).

Ten years ago, the first humanitarian mission work abroad began, focusing on the need for holistic care. Since then, there have been opportunities to provide care in various cultural settings, from towns to the wilderness, involving very different catering for everything from missionary clinics to providing triage or emergency care in tented field hospitals. Through both validated and unrecognised care provider roles, one's own experiences in past missions, as well as encouragements to others to get involved – whether with local communities or exploring humanitarian work abroad – are shared. There are endless opportunities to help, only requiring good will, adaptation, a sense of limits and personal safety. But most importantly, enriching and formative experiences await with each encounter and mission.

13. Research in Family Medicine

Family Medicine's principal advocacy research organization is the North American Primary Care Research Group. Family medicine research is accomplished in academic settings, community clinics, and direct service programs. In addition to the usual complexities and rigors of research, family medicine researchers traverse the treacherous ice of two worlds—academic life and clinical practice (B Ventres et al., 2024). In academic settings, the challenge is to maintain a family medicine focus while existing in a culture dominated by other specialties. In clinical settings, the challenge is to conduct rigorous research while meeting clinical responsibilities and "taking care of business."

Family medicine has been energized and enriched by research conducted in both traditional academic settings and "out in the field," in non-traditional settings such as community clinics and investigatory programs run by practitioners. While some academic family physicians believe practitioners should leave research to those with protected time, others assert that practitioners are best equipped to conduct research that advances the discipline. Multi-site studies led by academic family physicians with practitioner co-investigators help bridge the basic science/clinical practice divide. Community-based participatory research, with its emphasis on collaboration, respect for local expertise, and the cultivation of partnerships, creates space for researchers and practitioners to share power, responsibilities, and ultimately credits. Practitioners can take on "senior" or "co-PI" roles, attaching research to their work while also pursuing clinical priorities.

13.1. Clinical Trials

INTRODUCTION Comprehensive care, in the context of health and medical care, is defined as a "system of care in which all of a person's health needs are met with minimal fragmentation." This includes physical, mental, and social health needs throughout life. It is

essential to health and the sustainability of a medical care system, especially in an aging society. In the 75th World Health Assembly, comprehensive care was emphasized to ensure Universal Health Coverage. Comprehensive care is particularly important for old people with multimorbidity, which is associated with poorer health outcomes. Comprehensive care has not been systematically investigated. Family medicine is a specialty to ensure comprehensive care and improve the healthcare system. In Japan, family medicine was introduced to rural areas to investigate its effectiveness in improving comprehensive care. Japan is a super-aged society, with 28% of its population being over 65 years. This proportion is estimated to exceed 35% by 2040. Japan has the largest percentage of old people in the world. Nations worldwide are encouraged to develop a comprehensive strategy to address healthy longevity and support for died care. Aging causes various health problems, which can decrease quality of life. Most old people have multiple health problems, or multimorbidity, which is associated poorer health outcomes and proactive healthy longevity. Health problems usually begin with one disorder, and other disorders accrue because of shared risk factors, diseases, lifestyle, and social networks. In addition to a greater number of diseases, older people may incur more complex biopsychosocial health problems, which involve multiple care sectors, such as medical, mental, and social. Fragmentation of care across multiple medical sectors deteriorates treatment for old people with multimorbidity and complex health problems. To deal with complex multimorbidity, a system of care is needed that targets all of a person's health needs with minimal fragmentation or comprehensive care (Ohta et al., 2021). Internationally, old people are often cared for by general practitioners or family physicians, who are specialists in comprehensive care. However, Japan lacks an adequate number of family physicians. Specialized hospitals have expanded since the 1990s, fragmenting care. A system is needed to bridge the gap between care providers. Various healthcare professionals must collaborate. Health and care professionals need multiple skills to take care of older people with family and social support systems. Health and care professionals should be educated in a way that ensures they have the necessary skills and attitudes to work in an integrated system. With educational institutions taking the lead, different health and care professions could learn together both in the classroom and in practical settings.

13.2. Health Services Research

Health services research is concerned with examining the quality, quantity and organization of health and healthcare services, and the effect of these elements on health outcomes. Family physicians, as the commonest provider of health services in many countries, are increasingly involved in and the subject of research in this area. Such research is often epidemiological, evaluating the effects of different services on the health of populations (P. MF Rahman et al., 2023). Family physician services have been associated with a range of beneficial effects. Family physicians are essential for assessing, co-ordinating and integrating the complex array of contemporary health interventions to ensure patients benefit optimally from them. Family physicians deal with the great majority of health problems, and prevent many diseases in individuals, but also in whole populations through community health efforts. They have access to well-defined populations and can influence and guide health service development and policy, both because of their knowledge of population health needs and their understanding of the strengths and weaknesses of the health services available. Family physicians can in turn

influence the way physicians in training view their future role by ensuring that their own practices exemplify the values and approaches considered central to family medicine.

14. The Future of Family Medicine

Continuity nourishes the seed that is planted when doctors and patients first meet, allowing healing relationships to grow into something wonderful and unexpected (B Ventres et al., 2024). In family medicine, much attention has been given to how continuity can occur between different care venues, from hospital to office to home. There is also a focus on different health care disciplines, as family physicians work in partnership with specialists, nurses, pharmacists and others, often in team settings to promote patient health and well-being. Efforts are made to coordinate care as patients may traverse many venues and disciplines where continuity may be disrupted and inefficiencies and errors occur.

Most of a family physician's individual patient contacts are for episodic, acute problems. However, family physicians are trained to see and manage a variety of different medical illnesses and conditions over the lifetimes of patients in a variety of settings. Some family medicine residencies even require that a portion of faculty be obstetricians so that mothers and their newly-born children can receive care from the same family physician. This comprehensiveness of care is key to improving care, decreasing healthcare costs and working towards health equity. Comprehensiveness is one of the core principles of primary care, though family physicians typically have a scope of practice that is broader than other primary care specialties. Such breadth and depth of scope by which family physicians attend to patients' medical problems is called comprehensiveness. Comprehensiveness is associated with numerous benefits. These include greater efficiency with better health outcomes provided at lower costs. Comprehensive care is also associated with decreased rates of hospitalisations and better self-reported health outcomes by patients themselves.

14.1. Innovations in Practice

Innovations in Practice Innovations are commonplace in family medicine and generally involve a new approach or method to performing an activity. With family medicine's emphasis on understanding the whole patient within their biopsychosocial context and sustaining a long-term healing relationship, it is ideally suited to innovate new models of care. During the COVID-19 pandemic, family physicians experienced unprecedented challenges but also showcased inspiring innovations that improved care and enhanced team functionality. A few stories are shared to inspire other family physicians to reflect on their care innovations and potentially share narratives of what worked, what didn't, and why.

Improving access to care by training community health workers During the pandemic, a telephonic triage system was developed for an underserved rural population. In 2017, a family physician led primary care team began providing care in this community, establishing trust and understanding. To improve access during COVID-19, community health workers were trained to detect symptoms and counsel patients using a call checklist. Regular primary care team doctor-supervised triage calls addressed high-risk cases. These adjustments ensured care continuity and reduced hospital visit anxiety. The acceptance of health worker calls mitigated the misinformation spread by unregulated private sector operators (P. MF Rahman et al., 2023).

14.2. Workforce Challenges

The worldwide workforce shortage and maldistribution of family physicians is almost paradoxical. Family medicine is one of the most popular specialties in countries where it is required of graduating medical students, such as in many European nations, Canada, and Australia. On the other hand, family medicine is often a neglected specialty choice of graduating students in nations that do not mandate its practice, the US prominently among them. Family medicine International does not maintain level membership equity; family medicine as a specialty does not enjoy nor command appropriate equity group physician resources across the globe. The 'Four Pillars for Primary Care Physician Workforce' model may be useful for nations like the US, with an inadequate primary care physician workforce, to build in good part with family medicine pooled resource equity the necessary foundation for primary care continued reform and development in the spirit of the World Health Organization's Goals for Health 2030 (Weidner & Davis, 2018). A viable workforce is essential to maintain the capacity and sustainability of an ever-changing health system. Comprehensive Care has been the foundation of family physician training in Australia since its inception. External forces threaten the viability of this essential component of the training system. Without vigilance, attention, and effort from many stakeholders, Comprehensive Care within the vocational training system may be at risk. Stability may be maintained in the short-term. However, evidence points to significant challenges in the medium- to long-term; this needs thoughtful consideration.

15. Conclusion

Physicians engaged in family medicine and comprehensive care characterise patient well-being through storylines. Despite differing local contexts, the importance of patient narrative, familial involvement and social network support is evident. Contextualising well-being renews the call for family medicine's prominence in healthcare systems, particularly in managing chronic conditions and psychosocial concerns. Holistic care, caring for patients in their social environment, and the importance of family and significant others are historic and scholarly cornerstones of family medicine. Recent discussions surrounding levels of care have emphasised the need for a wider interpretation of comprehensive care, addressing physical, social and mental dimensions within community settings. The introduction of a broad storyline approach invites reflection on how care providers and scholars perceive and enact comprehensive care, supporting local adaptation while fostering a global vision.

Nine scholars provide contextualised storylines from Canada, France, Germany, the Netherlands, New Zealand, Norway, Spain, the UK and the USA, portraying care arrangements and encounters within the broader framework of family medicine and comprehensive care. These vignettes illuminate how care takes shape locally and address questions regarding the cultural shaping of care, innovative adjustments in response to challenges, and exploration of shared principles. Recognising the role of contextual factors helps clinicians understand patients' perspectives. Bringing significant family members to office visits promotes adherence to treatment plans. Learning about families enables physicians to leverage natural support systems for patient health and well-being. This focus has shifted in the face of family dysfunction, societal change, the professionalisation of family roles and awareness of patients as "social beings." Nonetheless, patient social networks remain vital to clinicians'

understanding of patients and their care. In summary, while family and social contexts continue to play a role in clinical practice, postmodern approaches recognise the growing complexity of these contexts and their potential for care (B Ventres et al., 2024).

References:

P. MF Rahman, S., Harika, N., Kumar, V., & Jebaraj, A. (2023). Patient stories: Integrated learning for family physicians and primary health care teams. ncbi.nlm.nih.gov

Ohta, R., Ueno, A., Kitayuguchi, J., Moriwaki, Y., Otani, J., & Sano, C. (2021). Comprehensive Care through Family Medicine: Improving the Sustainability of Aging Societies. ncbi.nlm.nih.gov

B Ventres, W., A Stone, L., A Joslin, T., W Saultz, J., Aldulaimi, S., R Gordon, P., C Lane, J., R Lee, E., Prunuske, J., Gildenblatt, L., H Friedman, M., T Fogarty, C., H McDaniel, S., Rohrberg, T., & Odom, A. (2024). Storylines of family medicine III: core principles—primary care, systems and family. ncbi.nlm.nih.gov

Kusnanto, H., Agustian, D., & Hilmanto, D. (2018). Biopsychosocial model of illnesses in primary care: A hermeneutic literature review. ncbi.nlm.nih.gov

Williams, N., Wilkinson, C., Stott, N., & B Menkes, D. (2008). Functional illness in primary care: dysfunction versus disease. ncbi.nlm.nih.gov

Amutio Careaga, A., García Campayo, J., Carlos Delgado, L., Hermosilla Pérez, D., & Martínez de Taboada Kutz, C. (2017). Improving Communication between Physicians and Their Patients through Mindfulness and Compassion-Based Strategies: A Narrative Review. [PDF]

R. Toukhsati, S. & L. Hare, D. (2016). Towards Optimal Heart Failure Care: Couples-Oriented Strategies to Improve Patient Adherence and Health Outcomes. ncbi.nlm.nih.gov

Ohta, R., Yakabe, T., & Sano, C. (2023). Sustainable Involvement of Family Physicians for Improving Help-Seeking Behaviors in Rural Communities: A Thematic Analysis. ncbi.nlm.nih.gov

Murray Cramm, J. & Petra Nieboer, A. (2016). Is “disease management” the answer to our problems? No! Population health management and (disease) prevention require “management of overall well-being”. ncbi.nlm.nih.gov

J. O’Donnell, A., R. Bogner, H., Kellom, K., Miller-Day, M., F. de Vries McClintock, H., M. Kaye, E., Gabbay, R., & F. Cronholm, P. (2016). Stakeholder Perspectives on Changes in Hypertension Care Under the Patient-Centered Medical Home. ncbi.nlm.nih.gov

Kalra, S., Saboo, B., H Cho, N., Sadikot, S., Hasnani, D., Chandarana, H., Verma, M., Bhandari, S., Gupta, A., & Aravind, S. R. (2019). Strengthening the Family – the ‘Five-I’ Approach. ncbi.nlm.nih.gov

B. Bridgeman, M. & A. Wilken, L. (2021). Essential Role of Pharmacists in Asthma Care and Management. ncbi.nlm.nih.gov

D. Boston, C. & J. Bryan, J. (2018). Immunizations in Athletes. ncbi.nlm.nih.gov

Page, D., Meires, J., & B. Dailey, A. (2002). Factors Influencing Immunization Status in Primary Care Clinics. [PDF]

B Ventres, W., A Stone, L., C Barnard, K., G Shields, S., J Nelson, M., Verónica Svetaz, M., M Keegan, C., J Heidelbaugh, J., B Beck, P., & Marchand, L. (2024). Storylines of family medicine VII: family medicine across the lifespan. ncbi.nlm.nih.gov

Atkinson Cook, E., Duenas, M., & Harris, P. (2022). Polypharmacy in the Homebound Population. ncbi.nlm.nih.gov

Famuyiro, T., Montas, A., Tanoos, T., E Obinyan, T., & Raji, M. (2023). Deprescribing in Real Time: Hospitalized Septuagenarian With Polypharmacy. ncbi.nlm.nih.gov

J Barnard, A. (2004). Involvement of the family physician in palliative care : an outcome analysis. [PDF]

Noonan, M., Doody, O., Jomeen, J., O'Regan, A., & Galvin, R. (2018). Family physicians perceived role in perinatal mental health: an integrative review. [PDF]

Thomas, S., Jenkins, R., Burch, T., Nasir, L. C., Fisher, B., Giotaki, G., Gnani, S., Hertel, L., Marks, M., Mathers, N., Millington-Sanders, C., Morris, D., Ruprah-Shah, B., Stange, K., Thomas, P., White, R., & Wright, F. (2016). Promoting mental health and preventing mental illness in general practice. [PDF]

Lauria-Horner, B., Beaulieu, T., Knaak, S., Weinerman, R., Campbell, H., & Patten, S. (2018). Controlled trial of the impact of a BC adult mental health practice support program (AMHPSP) on primary health care professionals' management of depression. ncbi.nlm.nih.gov

M. McGough, P., M. Bauer, A., Collins, L., & C. Dugdale, D. (2016). Integrating Behavioral Health into Primary Care. ncbi.nlm.nih.gov

Sakurai, H., Takeshima, M., Inada, K., Aoki, Y., Ie, K., Kise, M., Yoshida, E., Tsuboi, T., Yamada, H., Hori, H., Inada, Y., Shimizu, E., Mishima, K., Watanabe, K., & Takaesu, Y. (2023). Clinical practice for unspecified anxiety disorder in primary care. ncbi.nlm.nih.gov

Sapra, A., Bhandari, P., Sharma, S., Chanpura, T., & Lopp, L. (2020). Using Generalized Anxiety Disorder-2 (GAD-2) and GAD-7 in a Primary Care Setting. ncbi.nlm.nih.gov

Kumar, R. & Kumar Chattu, V. (2018). What is in the name? Understanding terminologies of patient-centered, person-centered, and patient-directed care!. ncbi.nlm.nih.gov

C. Stange, K., A. Nutting, P., L. Miller, W., R. Jaén, C., F. Crabtree, B., A. Flocke, S., & M. Gill, J. (2010). Defining and Measuring the Patient-Centered Medical Home. ncbi.nlm.nih.gov

Poduri, A., Devinsky, O., Tabacinic, M., & R Jadad, A. (2020). Experiencing Positive Health, as a Family, While Living With a Rare Complex Disease: Bringing Participatory Medicine Through Collaborative Decision Making Into the Real World. ncbi.nlm.nih.gov

P. Tamirisa, N., S. Goodwin, J., Kandalam, A., K. Linder, S., Weller, S., Turrubiate, S., Silva, C., & S. Riall, T. (2017). Patient and physician views of shared decision making in cancer. ncbi.nlm.nih.gov

Blonigen-Heinen, P. & Basol, R. (2015). Developing Cultural Competence. [PDF]

Akins, R. (2009). Teaching Cultural Sensitivity to Pediatric Residents. [PDF]

Cheng, A., Estela Vasquez Guzman, C., C. Duffield, T., & Hofkamp, H. (2021). Advancing Telemedicine Within Family Medicine's Core Values. ncbi.nlm.nih.gov

Menachemi, N., Perkins, R., VanDurme, D., & Brooks, R. (2006). Examining the adoption of electronic health records and personal digital assistants by family physicians in Florida. [PDF]

M Gabbay, J., Hatzimemos, A., & J Bottino, C. (2022). An Approach to Family-Centered Electronic Health Records in Pediatrics. ncbi.nlm.nih.gov

L Pott, S. & M Drake, D. (2016). Developing Partnerships to Expand Interprofessional Practice-Focused Educational Experiences in High-Risk Obstetric Care. [PDF]

G. A. Pujalte, G., Ann Pantin, S., A. Waller, T., Y. Maruoka Nishi, L., B. Willis, F., P. Jethwa, T., & J. Presutti, R. (2020). Patient-Centered Medical Home With Colocation: Observations and Insights From an Academic Family Medicine Clinic. ncbi.nlm.nih.gov

Liu, L., T. Chien, A., & J. Singer, S. (2023). Enabling System Functionalities of Primary Care Practices for Team Dynamics in Transformation to Team-Based Care: A Qualitative Comparative Analysis (QCA). ncbi.nlm.nih.gov

N. Tallent, C. (2011). The Referral Process: Rural Primary Care Physiciansu27 Perspectives on Providing Counseling Referrals. [PDF]

B. Beidler, L., Razon, N., Lang, H., & K. Fraze, T. (2022). “More than just giving them a piece of paper”: Interviews with Primary Care on Social Needs Referrals to Community-Based Organizations. ncbi.nlm.nih.gov

Ratanzi, R. & M. Gaede, B. (2020). Family medicine in Tanzania: Seize the moment. ncbi.nlm.nih.gov

Weidner, A. & Davis, A. (2018). Influencing medical student choice of primary care worldwide: international application of the four pillars for primary care physician workforce. ncbi.nlm.nih.gov