DEVELOPMENT AND VALIDATION OF A QUESTIONNAIRE ASSESSING EXPECTATIONS OF THE CHARACTERISTICS OF FRIENDLY PRIMARY HEALTH SERVICES FROM MEN'S PERSPECTIVE

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By

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DECLARATION

I, Muhammad Zikri bin Ab Aziz, declare that the work presented in this thesis is originally mine. The information which has been derived from other sources is clearly indicated in the thesis.

Muhammad Zikri bin Ab Aziz

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LIST OF SYMBOLS

Df	Degree of freedom
χ^2	Chi-square
<	Less than
>	More than
=	Equal to
≤	Less than and equal to
≥	More than and equal to
%	Percentage

LIST OF ABBREVIATIONS

AHRQ	Agency for Healthcare Research and Quality
CFA	Confirmatory factor analysis
CFI	Comparative fit index
CVI	Content validity index
DHHSV	Department of Health and Human Services Victoria
EFA	Exploratory factor analysis
EMHF	European Men's Health Forum
FVI	Face validity index
KMO	Kaiser-Meyer-Olkin
MOIC	Medical Officer In-charge
MI	Modification indices
MSA	Measure of sampling adequacy
NEJM	New England Journal of Medicine
NIDA	National Institute on Drug Abuse
NSW	New South Wales
RMSM	Root Mean Squared Residual
RMSEA	Root mean square error of approximation
SD	Standard Deviation
SPSS	Program for Social Sciences
STI	Sexually Transmitted Illnesses
UNPF	United Nations Population Fund
WHO	World Health Organization

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ABSTRAK

PEMBANGUNAN AND PENGESAHAN SOAL SELIDIK UNTUK MENILAI JANGKAAN TERHADAP CIRI-CIRI PERKHIDMATAN KESIHATAN PRIMER YANG MESRA DARI PERSPEKTIF LELAKI

Latar belakang: Penggunaan perkhidmatan penjagaan kesihatan yang kurang boleh menyumbang kepada status kesihatan yang kurang baik di kalangan lelaki. Kajian ini bertujuan meneroka pengalaman lelaki terhadap perkhidmatan kesihatan primer dan jangkaan mereka terhadap ciri-ciri perkhidmatan kesihatan primer yang mesra di Kelantan, Malaysia, dan membangunkan soal selidik yang menilai jangkaan tersebut.

Kaedah: Kajian ini dijalankan dalam dua fasa menggunakan pendekatan kaedah kajian campuran. Fasa pertama melibatkan pembangunan soal selidik berdasarkan sorotan kajian yang meluas, temubual mendalam dengan lelaki dewasa di Kelantan, kesahan kandungan, kesahan muka, dan ujian rintis. Temu bual secara bersemuka telah dijalankan dengan 15 lelaki dewasa yang dipilih secara bermatlamat menggunakan kaedah persampelan variasi maksimum daripada enam fasiliti kesihatan primer kerajaan di Kelantan. Data ditranskripkan dan dianalisis menggunakan kaedah analisis tematik. Dapatan kajian kualitatif digunakan sebagai asas penjanaan item. Proses ini diikuti dengan kesahan kandungan oleh tujuh pakar dan kesahan muka oleh 10 lelaki dewasa di Kelantan. Fasa kedua melibatkan analisa penerokaan faktor (EFA) dan analisa pengesahan faktor (CFA) untuk mengukur kesahan dan kebolehpercayaan struktur dalaman soal selidik. Kajian hirisan lintang telah dijalankan untuk EFA dengan 280 peserta terpilih yang dirasakan sesuai dan diikuti oleh 280 lagi untuk CFA di lapan klinik kesihatan primer kerajaan di Kelantan.

Keputusan: Dapatan temubual menunjukkan bahawa tema pengalaman lelaki dengan perkhidmatan kesihatan primer sedia ada diperoleh daripada empat sub-tema: penyediaan perkhidmatan kesihatan, penyampaian promosi kesihatan, ciri-ciri penyedia perkhidmatan kesihatan, dan persekitaran fizikal kemudahan kesihatan. Empat sub-tema lain membentuk tema jangkaan lelaki terhadap ciri-ciri perkhidmatan kesihatan primer yang mesra: memenuhi keperluan lelaki dalam perkhidmatan kesihatan primer, mendekati lelaki melalui strategi promosi kesihatan yang berkesan, standard penyedia perkhidmatan kesihatan dari pandangan lelaki, dan persekitaran fizikal yang selesa untuk lelaki. Satu soal selidik baharu telah dibangunkan dengan 69 item dan empat domain. Proses kesahan kandungan telah mengurangkan item kepada 65, dengan beberapa item yang mempunyai nilai I-CVI yang rendah dikekalkan untuk diuji dalam proses berikutnya. Dua item telah dikurangkan hasil dari kesahan muka dengan baki 63 item telah diuji untuk EFA, yang telah menghasilkan satu model hipotesis baharu dengan 44 item dan lapan domain. Model ini telah disemak semula semasa CFA, dan model terbaik dengan lima domain dan 39 item yang memenuhi analisa kecergasan model telah dipilih sebagai model yang digunakan di dalam soal selidik akhir.

Kesimpulan: Soal selidik yang baru dibangunkan dengan 39 item dalam lima domain berkaitan, iaitu penyediaan perkhidmatan kesihatan, lanjutan masa perkhidmatan, promosi dan pendidikan kesihatan, ciri-ciri penyelia perkhidmatan kesihatan, dan persekitaran fizikal kemudahan kesihatan, adalah instrumen yang sah dan boleh dipercayai untuk menilai jangkaan terhadap ciri-ciri perkhidmatan kesihatan primer yang mesra dari perspektif lelaki di Kelantan.

Kata kunci: jangkaan, lelaki, ciri-ciri perkhidmatan, perkhidmatan mesra lelaki, perkhidmatan kesihatan primer

ABSTRACT

DEVELOPMENT AND VALIDATION OF A QUESTIONNAIRE ASSESSING EXPECTATIONS OF THE CHARACTERISTICS OF FRIENDLY PRIMARY HEALTH SERVICES FROM MEN'S PERSPECTIVE

Background: Underutilization of healthcare services may contribute to poor health status among men. This study aimed to explore men's experiences with primary health services and their expectations regarding the characteristics of friendly primary health services in Kelantan, Malaysia, and develop a questionnaire assessing those expectations.

Methodology: The study was conducted in two phases using a mixed-method approach. Phase One involved the development of a questionnaire based on an extensive literature review, in-depth interviews with adult males in Kelantan, content validation, face validation, and pilot testing. Face-to-face interviews were conducted with 15 adult males purposefully selected using a maximum variation sampling method from six government-based primary health facilities in Kelantan. Data were transcribed and analyzed using the thematic analysis method. The qualitative study findings were used as the basis for item generation. The procedure was followed by content validation by seven experts and face validation by ten adult males in Kelantan. Phase two involves exploratory factor analysis (EFA) and confirmatory factor analysis (CFA) to measure the questionnaire's internal structure validity and reliability. A cross-sectional study was conducted for EFA with 280 conveniently selected participants and followed by another 280 for CFA in eight government primary health clinics in Kelantan.

Results: The interview findings showed that the theme of men's experience with existing primary health services was derived from four subthemes: provision of health services, health promotion delivery, attributes of healthcare providers, and the physical environment of the health facilities. Four other subthemes formed the theme of men's expectations of the characteristics of friendly primary health services: meeting men's needs in primary health services, approaching men through effective health promotion strategies, standards of a healthcare provider from a men's viewpoint, and a comfortable physical environment for men. A new questionnaire was developed with 69 items and four domains. Following the content validation phases, items were reduced to 65, with several items with low I-CVI maintained for testing in the following process. Two items were deleted during face validation, with the remaining 63 items tested for EFA, yielding a new hypothesized model with 44 items and eight domains. The model was revised during CFA, and the best model of five domains and 39 items that met the model fitness analysis was chosen as the final questionnaire.

Conclusion: The newly developed questionnaire with 39 items in five respective domains, which are the provision of health services, service time extension, health promotion and education, characteristics of healthcare providers, and physical environment of health facilities, is a valid and reliable instrument for assessing expectations of the characteristics of friendly primary health services from men's perspective in Kelantan.

Keywords: expectations, adult males, service characteristics, male-friendly services, primary health services

CHAPTER 1

INTRODUCTION

1.1 Background

Men and women had vastly varied health and disease experiences. According to NSW Health Department (1999), men's health can be defined as any issue, condition, or determinant that affects the quality of life of a man and/or for which different responses are required in order for men (and boys) to experience optimal social, emotional and physical health. An additional definition by Tan *et al*., (2013) is that men's health is a discipline that promotes the physical, mental, and social well-being of men throughout their life cycle (from boyhood to manhood) and addresses health problems related to men. Therefore, men's health is a concept that concerns broad aspects related to men and not just specifics men's sexual and reproductive health issues.

Differences in health status between men and women have been reported in many nations worldwide, with men having shorter life expectancy than women (Luy & Gast, 2014; Thornton, 2019). Premature mortality rates among men have become a growing public health concern. Reports showed that men are more prone to premature death from non-communicable diseases such as coronary heart disease, lung cancer, and stroke compared to women (Ross *et al*., 2012; Thornton, 2019). In 2022, global data show that women outlived men, with a life expectancy at birth of 76 years compared to men, a life expectancy at birth of 71, five years lower compared to women's (WHO, 2022).

Malaysia was not spared from facing this problem as the life expectancy of men in Malaysia in 2021 was at 73.2 years, 5.1 years lower compared to women at 78.3 years (DOSM, 2021a). In addition, the life expectancy for men in Malaysia differs by state, with

men in Kelantan having one of the lowest life expectancies compared to men in other states (MOH Malaysia, 2020). The life expectancy of men in Kelantan in 2021 was 69.9 years, 3.3 years lower than the national level and 6.6 years lower than women from the same state, which shows disparities in men's health status in the state (DOSM, 2021a).

Kelantan is a state in Malaysia located in the northeastern part of the country. The population of Kelantan is predominantly Malay (93.8%), Chinese (3.0%), Indian (0.3%), other ethnicities (0.6%), and non-Malaysian (2.3%). Men's population has slightly outnumbered women, with men accounting for 0.96 million and women with 0.94 million (DOSM, 2021c). As most of them are Malay, men in Kelantan generally follow the cultural practices and traditions of the Malay people and often hold religious beliefs and may follow the practice of Islam, which is the predominant religion in the state, with other religious comfortably practiced by followers of other religions (Pawanteh & Kuake, 2016). In terms of employment, men in Kelantan are involved in various sectors, including agriculture, fishing, and trading, and many also work in the service industry, including hospitality and tourism (DOSM, 2020a, 2021c). Kelantan men's knowledge and awareness of men's health were low influenced by various factors, including their cultural and religious beliefs, personal experiences, and access to healthcare services. In addition, some men in Kelantan might turn to traditional remedies and practices to support their health and wellbeing (Fadhil Hafiz & Yusuf, 2016; Arumugam *et al.*, 2020).

Previous studies suggested that the potential explanations for disparities in mortality between men and women include the biological factors, risks associated with social roles, the environment, and men's behaviour (Luy & Gast, 2014). A meta-analysis of the variability in mortality in men and women in 2014 found that the primary

contributing factor to current sex inequalities in life expectancy is the relatively high mortality rates in specific male subpopulations, mainly among socioeconomically disadvantaged men groups (Luy & Gast, 2014). In addition, they also emphasized that male excess mortality is not a universal phenomenon that applies equally to all subpopulations. Besides, men in the risk groups with the highest mortality are more disadvantaged than women compared to the average (Luy & Gast, 2014).

WHO (2018) listed various factors influencing men's health disparity, including their attitudes, risk exposure, health-seeking behaviours, and how health services are provided (WHO, 2018). Men are more prone than women to participate in dangerous and detrimental behaviour, such as excessive alcohol drinking, fighting, and illegal drug use, according to earlier research on men's behaviour (Ross *et al*., 2012; NIDA, 2020). Concerning health services provided for men, evidence showed that men might not be satisfied with the health services provided. For example, a qualitative study in South Africa on healthcare workers' experiences and perspectives on men's engagement in HIV care revealed that the healthcare workers recognized that some men were unhappy with their experience with clinic health services (Mbokazi *et al.*, 2020). They also highlighted that men's low engagement in health services could be influenced by the design and quality of health services they received, including inappropriate health care providers' attitudes and behaviour toward men.

A few decades ago, many health services policymakers did not consider men's health vital enough to demand attention, despite the fact that many healthcare professionals have noticed and reported differences in the health status of different groups of men and women (NSW Health Department, 1999). Nowadays, men continue to have

lower health outcomes than women worldwide, yet many health policymakers and healthcare providers still have paid little attention to this gender inequality in health services on a national, regional, or international level (Baker *et al.*, 2014). In addition, poor health services utilization by men was identified as one of the root causes of poor men's health status, necessitating that the health system to be reformed to account for demographic group variation, including different social groups of men, in order to provide more equitable health services (Oliver *et al.*, 2005; EMHF, 2009).

Several countries have taken proactive action in improving men's health by developing their own men's health plans of action or policy. For example, Ireland has become the first to publish national men's health policies (EMHF, 2009). Other countries with men's health plans of action or policy include Australia, Malaysia, Iran, Brazil, Mongolia, and South Africa (White & Tod, 2022). WHO has also recognized the importance of improving men's health and published a paper on strategies to improve the health and well-being of men in the WHO European Region. The necessity of understanding men's health needs and the need to improve health service delivery by providing more male-friendly and flexible primary health services were emphasized in these strategies (WHO, 2020).

Malaysia started showing interest in men's health in 2002. Along the way, the government made a broad commitment to work toward national men's health policy (EMHF, 2009), but the passionate discussion to establish a National Plan of Action only began in 2015. As a result, the Ministry of Health (MOH) Malaysia successfully launched its first National Men's Health Plan of Action in 2018, promoting gender equity through measures targeting Malaysian men's health and quality of life. In addition, it also

emphasized the establishment of friendly health services for men's health (MOH Malaysia, 2018).

Based on the National Men's Health Plan of Action Malaysia 2018-2023, many factors have been identified to influence men's health-seeking behaviour and can be divided into individual and external factors (MOH Malaysia, 2018). Individual factors include fear of contracting a disease and low-risk perception. In contrast, external factors include cumbersome screening procedures, complicated healthcare systems, inadequate healthcare provider efforts in recommending health checks, general misunderstandings about men's health, and reluctance to offer men's health screening among primary care doctors. In addition, MOH Malaysia has emphasized increasing efforts to reduce barriers for men to attend or seek health services, including providing a male-friendly environment that might benefit men's health in the country (MOH Malaysia, 2018).

Male-friendly health services are the health services that meet the needs of men related to the provision of health services required by men and the provision of facilities that can promote positive healthcare utilization by men (Mashi, 2020). Male-friendly primary health services make use of existing infrastructure to create a separate space, or in certain situation and times, only allow men to access to the health services (PEPFAR, 2018). This study focused on men's experiences with primary health services and expectations of characteristics of friendly primary health services from men's perspectives.

Friendly primary health services are primary healthcare services that are accessible, patient-centered, comprehensive, culturally appropriate, collaborative, and continuously improving to meet the healthcare needs of individuals and communities in a

caring, accommodating, and timely manner. Friendly primary health services prioritize the needs and preferences of the patients and are delivered by healthcare providers that work together to provide coordinated and efficient care. It is also tailored to patients' needs, considering their health problems and personal and social circumstances.

1.2 Problem Statement

There is growing evidence from global research that men are prone to delay seeking health services for effective treatment compared to women (Galdas *et al*., 2005; White *et al.*, 2006). For example, a recent mixed-method study in Kelantan, Malaysia, on treatment-seeking behaviour among male civil servants found that 64.6% of the respondents had inappropriate treatment-seeking behaviour (n= 381) (Arumugam *et al.*, 2020). In the qualitative part of the research, it was discovered that many participants engaged in inappropriate treatment seeking, as they would only seek care when they felt severely ill and did not interact effectively with health services (Arumugam *et al.*, 2020). Several barriers that lead to delayed treatment seeking include the long waiting hour at clinics, the poor appointment system, and the limited availability of doctors (Arumugam *et al.*, 2020).

The gender stereotypes and presumptions had negatively impacted men's health services, where many previous researchers and clinicians accused men of not being interested in seeking health support for health problems, especially sexual and reproductive health (Galdas *et al*., 2005). As a result, other factors influencing men's engagement with health services were often underestimated, including the design and quality of health services and healthcare providers' attitudes and practices toward male

patients (Mbokazi *et al*., 2020). In addition, inappropriate healthcare providers' attitudes toward men could create negative images and perceptions among men.

A cross-sectional study of 610 African-American men found that medical mistrust may delay the start of routine health examinations and prevent them from receiving recommended services (Hammond *et al.*, 2010). Medical mistrust is a propensity to distrust medical institutions and the health staff who are thought to represent a society's dominant culture, and it is an active reaction to the marginalization that occurred directly or indirectly (such as through intergenerational or social network stories) (Benkert *et al.*, 2019). Another study exploring barriers to mental health seeking among young men in Ireland discovered that some did not trust health professionals and perceived that the health services were meant for women (Lynch *et al*., 2018). Therefore, lacking trust in health services and professionals may prevent individuals, including men, from receiving the required health care or being treated effectively when seeking care (Joszt, 2019). In addition, perceiving that the health services are not tailored to their needs also may worsen the poor engagement of men with health services (Tong *et al.*, 2011a).

Poor primary health services usage by men might be due to men's expectations of the characteristics of friendly primary health services not being met. Despite increasing awareness of improving primary health services for men, there is still a lack of proper questionnaires assessing men's expectations of the characteristics of friendly primary health services. In fact, no validated questionnaire corresponds to Malaysian men's expectations of a friendly primary health system. Many previous pre-existing questionnaires focused on factors influencing treatment-seeking behaviour among men and the patients' experiences or satisfaction with health services. There are questionnaires

on expectations of health services used in the previous study but not focusing on characteristics of friendly primary health services (Metcalfe & Moffett, 2005; Gamble *et al*., 2007; Barth *et al*., 2019). In addition, there are significant differences in the sociodemographic background of men in Kelantan and the Malaysian primary care settings from other countries that make expectations of the characteristics of friendly primary health services might not be similar or related.

1.3 Rationale of The Study

Therefore, developing and validating a new questionnaire on local men's expectations of the characteristics of friendly primary health services is necessary to obtain more information necessary for policymakers to enhance future primary health services for men. Understanding men's expectations of the characteristics of friendly primary health services allow researchers to explore infrequently highlighted factors that can influence health services usage among men related to the characteristics of the primary health services that men prefer. This is also important for policymakers in designing friendly primary health services in Kelantan that suit the local men population to ensure the policy's or programs' effectiveness and success. Besides, the local men's expectations of the characteristics of friendly primary health services are essential to be measured to provide services that align with the local needs that promote confidence and satisfaction to the users.

This study addressed the research gap in exploring local men's experiences with primary health services that may influence their perceptions and expectations of health services and to understand their expectations of the characteristics of friendly primary

health services. The study is also expected to provide a valid tool to assess the expectations of the characteristics of friendly primary health services that can be used as evidence-based data in delivering friendly services that suit the local men's community.

A mixed method approach was used in this study design to develop a new questionnaire exploring the men's experience with primary health services and expectations according to local contexts. A mixed-method study is a research approach that involves gathering both quantitative and qualitative data, integrating the two forms of data, and utilizing distinct designs that may incorporate philosophical assumptions and theoretical frameworks (Creswell, 2014). The core assumption in this method is that combining qualitative and quantitative methodologies produces a more thorough understanding of the research problem than each strategy itself (Creswell, 2014). Several strategies in the mixed-method study include sequential explanatory strategy, sequential exploratory strategy, sequential transformative strategy, concurrent triangulation strategy, concurrent nested strategy, and concurrent transformative strategy (Terrell, 2012).

This study used a sequential exploratory strategy, in which the collection and analysis of the qualitative data intended to explore the local men's experience with primary health services and their expectations of the characteristics of friendly primary health services. An in-depth interview was chosen as the method in the qualitative study to gather rich and detailed data about participants' experiences and expectations. It was followed by the collection and analysis of quantitative data to develop an instrument measuring those expectations (Terrell, 2012). In addition, the qualitative data were integrated for the development of the questionnaire.

The qualitative exploratory study is expected to add to the current limited knowledge of the local men's expectations of the characteristics of friendly primary health services and be the basis for developing a new and valid tool. In addition, the findings were expected to be used by policymakers and clinic administrators to enhance the well-being and satisfaction of men, improve men's engagement with health services, and subsequently improve their health.

1.4 Research Questions

1. How do men in Kelantan experience using primary health services, and what are their expectations of the characteristics of friendly primary health services?
2. How can the qualitative study findings on experiences with primary health services and expectations of characteristics of friendly primary health services be used to develop a questionnaire?
3. Is the newly developed questionnaire valid to measure the expectations of the characteristics of friendly primary health services among men in Kelantan?

1.5 Research Objectives

This part will highlight the general and specific objectives of the study.

1.5.1 General Objective

To explore men's experience and expectations of friendly primary health services and develop a questionnaire assessing those expectations.

1.5.2 Specific Objectives

1. To explore the experiences with primary health services and expectations of the characteristics of friendly primary health services among men in Kelantan
2. To integrate the qualitative study findings in the development of a new questionnaire assessing men’s expectations of the characteristics of friendly primary health services in Kelantan
3. To validate the newly developed questionnaire among men in Kelantan

1.6 Research Hypotheses

The newly developed questionnaire is valid for assessing men's expectations of the characteristics of friendly primary health services in Kelantan.

CHAPTER 2

LITERATURE REVIEW

This chapter explains the literature review focusing on men's experiences with primary health services and expectations of the characteristics of friendly primary health services. English-written qualitative and quantitative articles were included in the review. The databases used included the Cochrane Library, PubMed, Scopus, and Google scholar. The main search terms used to identify relevant literature were: men's health, male-friendly, primary health services, primary care, friendly primary health services, men's experience, men's expectation, patient's experience, patient's expectations, qualitative study, questionnaire development, validation, and reliability of a questionnaire.

2.1 Primary Health Services In Malaysia

Primary health care was defined by the World Health Organization (2019) as a whole-of-society approach to health and well-being focused on the needs of people, families, and neighborhoods. It highlights the broader determinants of health and emphasizes the comprehensive and interconnected aspects of physical, mental, and social health and well-being. Primary health service warrants the public to obtain comprehensive care, including health promotion, disease prevention, treatment, rehabilitation, and palliative care, provided at the community level (WHO, 2019).

Malaysia's primary healthcare system is mixed, with government and private primary healthcare providers playing a vital role in health services delivery (Atun *et al.*, 2016). The Malaysian public primary care health system has significantly and progressively evolved and consistently kept equity, accessibility, efficiency, and universal

health coverage in the background while responding to expanding requirements over the past decades (Fadzil *et al*., 2020). The government's primary health services provide almost 60% of total outpatient care through an extensive network of health clinics, community clinics, and mobile clinics that spread throughout the country, including in rural and remote areas (Atun *et al.*, 2016). Meanwhile, the remaining was provided by private healthcare providers clustered in Malaysia's urban areas (Atun *et al.*, 2016). The government's health clinics offer comprehensive curative and preventive ambulatory care for children and adults, as well as basic services, contingent on the clinics' staffing and available supportive services at the clinics (Atun *et al.*, 2016).

Family doctor concept (FDC) was proposed in 2013 and implemented in government-based primary health clinic settings to strengthen primary care in Malaysia. The main objective is to achieve the "One Family, One Doctor" concept so that the healthcare providers, especially the doctors, can provide the community with comprehensive, continuous, collaborative, personal, family- and community-oriented services (Ismail, Alimin & Reen, 2020). In this system, the doctors could see and treat the clients and their family members as a whole, without segmentation, while recognizing the broader determinants of health links to public health (Ismail, Alimin & Reen, 2020).

2.2 Men's Experience With Primary Health Services And Expectations of Friendly Primary Health Services

Traditional healthcare design considers the ideas of architects, construction engineers, and administrators and emphasizes efficiency and clinical functionality (Chou *et al.*, 2018). However, transitioning toward a more customer-oriented design in current healthcare

design has led to a recent research framework focusing on healthcare design attributes to customers' health and well-being (Chou *et al.*, 2018). In addition, friendly services have become one of the most important topics of discussion regarding patient-centric health services approaches.

In patient-centered care, all healthcare decisions and quality evaluations are guided by the specific needs and desires of the patients, and both patient and medical professionals work together as a partner to treat the patient's physical condition as well as their emotional, mental, spiritual, social and financial perspectives (NEJM Catalyst, 2017). The underlying belief is that patient-centric and value-based care offer efficiency gains to healthcare systems in the form of an increase in quality of life years; greater cost-effectiveness, promoted treatment adherence; decreased productivity loss and informal care burden, and contribution to employment sustainability (Fernandes *et al.*, 2020).

Men and women have distinct health patterns influenced by biological differences, including wider genetic, hormonal, and metabolic differences between the sexes and socially constructed distinctions among these groups that significantly affect their health (Doyal, 2004). The difference also makes them have different health needs and expectations in primary health services. Bostan *et al*., (2007) recommend that healthcare providers consider the interests, expectations, and desires of the community or patients to ensure service satisfaction. In addition, the expectation of clients or patients regarding health services is an essential determinant of quality and patient satisfaction with the health service provided. Research has demonstrated that concentrating on the related health risks, needs, attitudes, and behaviours of both men and women will ameliorate the

appropriateness and efficiency of health services provided for both groups (DHHSV, 2015).

The client's expectations of health services can be influenced by the types or forms of health services needed, its characteristics, economic facilities, past experiences, environmental factors, and existing services provided (Bostan et al., 2007). Patient experience comprises all encounters a patient has with the healthcare system, including care from health plans, physicians, nurses, and other health personnel at the health facilities (AHRQ, 2021). Understanding the patient experience with primary health services helps researchers and policymakers explore how patients receive care that respects and is sensitive to their individual preferences, needs, and values (AHRQ, 2021). Besides, patient experience data is useful in indicating system flaws, such as delays in returning test results and coordination and communication gaps that have significant quality and productivity implications (Browne *et al.*, 2010). The clients or patients, specifically the men for this study, may have past experiences with primary health services that influence their expectations of friendly primary health services. Besides, they might have specific agendas when receiving health services that reflect their concerns and problem that they want healthcare providers to address and solve (Berhane & Enquselassie, 2016). Therefore, understanding men's experience with primary health services helps better understand the expectations of the characteristics of friendly primary health services.

Previous studies had discussed patients' or clients' expectations of characteristics of health services concerning the services provided, physical condition, health promotions, and healthcare providers' characteristics (Bostan *et al.*, 2007; Berhane &

Enquselassie, 2016; Robertson *et al*., 2018a). Relevant literature regarding men's experience with primary health services and their expectations of the characteristics of friendly primary health services were further discussed under four subheadings as below.

2.2.1 Health Services Provision

In many nations, women's health, particularly maternal health, was developed appropriately in response to many health hazards, including pregnancy-related risks. Since an early age of life, women have been involved with health services, including health screening and health promotion. Unlike women, men's health program was lacking, with many men (or boys) lacking experience and not adequately involved with health services, especially in early life (White *et al*., 2006). In addition, men complained that there were insufficient services to meet their healthcare demands and they desired routine screenings and examinations similar to those offered for women (Coles *et al.*, 2010). Although currently, both men and women above the age of 40 in Malaysia are offered with free non-communicable disease screening under the National Health Screening initiative (Bernama, 2022), health screening or programs specifically for men, especially on men's sexual and reproductive health still lacking and not well established compared to what offered to women (MOH Malaysia, 2018). Therefore, providing early health programs or activities for men, like how health programs are available for women from puberty onwards for a non-illness related reason, might improve men's knowledge and health-seeking behaviour (White *et al*., 2006). In addition, non-involvement in health programs from early life may lead to failure to recognize the health services offered to them (White *et al*., 2006).

A national patient survey accessing the patient experience of access to primary care in England revealed that employed patients who could take time off from work to obtain primary healthcare services were more satisfied and had more positive experiences with the health services (Kontopantelis *et al*., 2010). In addition, a systematic review of barriers to health screening in adult males indicates that lack of time is one of the obstacles men face in undergoing health screening (Teo *et al.*, 2016). Men are exposed to salary reduction and/or stigma from coworkers if they take time off during office hours to utilize primary healthcare services (White *et al*., 2006; Johnson *et al*., 2008). Therefore, men are expecting extended service hours or days in primary health clinics as it could benefit many men who work during office hours and weekdays to receive care (White *et al*., 2006; Johnson *et al*., 2008).

Health programs that are fun and informal may promote young men's engagement with primary health services. Research by Sagar-Ouriaghli *et al*. (2020) on male students' engagement with mental health support reported that one of the participants in the qualitative study mentioned that he would prefer health services to be fun and enjoyable. However, it may not represent all men as men from different socio-demographics or ages, as others may have a different preference for the formality of health services. Besides, men who experienced long-term illness were frequently older and had extensive contact with healthcare services usually had distinct concerns compared to those who had infrequent contact, including young men with minimal contact with health services (Coles *et al.*, 2010).

Programs with non-sensitive titles may also help combat the stigma of men's health and improve men's engagement with health services (Sagar-Ouriaghli *et al.*, 2020).

As an example, men viewed that the title used in mental health support programs should not reflect the user having a mental problem to make them feel less alienating, allowing for a broader outreach to those who may not self-identify as having mental health issues or who have symptoms not generally linked to mental health (Sagar-Ouriaghli *et al.*, 2020).

One major component of male-friendly health services is the availability of men's sexual and reproductive health (SRH) services, as having access to SRH services is a crucial step in promoting men's engagement (UNPF, 2017; Mbokazi *et al*., 2020). Gender inequality in the provision of SRH services may negatively impact SRH choices and decisions among men, thus leading to poor health outcomes. For example, the involvement of adult males in screening and testing for sexual and reproductive health issues, including sexually transmitted illness (STI) screening, was still low, with frustration with low service quality and unmet need for health services had been recognized as barriers for men to use the services (Snow *et al.*, 2013; Mbokazi *et al.*, 2020).

Men had experience difficulty gaining access to health services due to inappropriate appointment systems and expecting quicker access to appointments with their primary healthcare providers (Coles *et al.*, 2010). In addition, men complained of having difficulty getting appointments with their primary healthcare physician due to the clinic's limited hours of operation, and some of them could not afford to take time off work (Coles *et al.*, 2010). A "man-friendly" appointment systems and consulting times with after-work and more on-the-day appointments, waiting rooms, and reception staff are the critical parts of a "whole-of-practice" approach in friendly health services for men

(Malcher, 2006). Practice nurses have demonstrated to be the key persons in building a relationship with men. So too, are receptionists who identify men's particular problems with 'the system' and help them negotiate it (Malcher, 2009). In addition, an efficient and friendly appointment system is needed by men to better engage with health services. Besides, the barriers identified for men's engagement in health services include inconvenient service hours and difficulty in making appointments experienced by men might be reduced by providing a male-friendly health system (Teo *et al.*, 2016).

Clinic policy on patient confidentiality and male-friendliness displayed and practiced in the clinic may increase the confidence and trust of men in the services (Sagar-Ouriaghli *et al.*, 2020). A research participant in a study done by Sagar-Ouriaghli et al. (2020) mentioned that *"people need more information about confidentiality because many people are afraid that if they say anything about their mental health problems, other people will find out and they may have problems with that"*. This can also relate to other sensitive health issues, such as sexual and reproductive health.

Table 2-1: Summary of important literature findings on health services provisions in primary health

Topic	Literature findings	Author & Years
Extension of service hours/ day	• Men are exposed to salary reduction and/or stigma from coworkers if they take time off during office hours to utilize primary health services	(White, Fawkner & Holmes, 2006)
	• Barriers to the engagement of men in primary health service include the opening time of services not appropriate for men's group	(Johnson, Huggard & Goodyear-Smith, 2008)

Early-life health program/activity for boys and men	• Men (or boys) lack experience and are not adequately involved with health services • Men demand routine screenings and examinations as offered to women	(White, Fawkner & Holmes, 2006) (Coles *et al.*, 2010)
Sexual and reproductive health service	• Low involvement of men in screening and testing of SRH issues related to frustration with low services quality and unmet need for the health services • Health services in the primary clinic had less focused attention on men's sexual and reproductive health needs (especially sexual dysfunction) or other health needs	(Snow *et al.*, 2013) (Mbokazi *et al.*, 2020)
Man-friendly appointment system	• Men complained about having difficulty getting an appointment with a primary healthcare physician due to limited hours of operation • "Man-friendly" appointment systems and consulting times with after-work and more on-the-day appointments are among the key parts of a "whole-of-practice" approach	(Coles *et al.*, 2010) (Malcher, 2006)
Clinic policy on confidentiality and male-friendliness	• Men need more information about confidentiality because a lot of them are afraid that if they say anything about their sensitive health issues, other people will find out about it	(Sagar-Ouriaghli *et al.*, 2020)
Health program with non-sensitive title	• Program with non-sensitive title helps combat the stigma of sensitive aspect of men's health program and promote men's engagement	(Sagar-Ouriaghli *et al.*, 2020)

2.2.2 Health Education And Promotion

A qualitative study on factors influencing men's decision to undergo health screening among a group of men in Kuala Lumpur, Malaysia, revealed that men had a misconception about health screening, thinking that health screening is not important and only would have medical check-ups if symptoms were present (Teo *et al*., 2017). In addition, some

participants also view health screening as unnecessary for them as long as they feel healthy, leading to delayed early screening.

Men commonly lack knowledge and awareness of health in general, specific diseases, and risk factors compared to women (DHHSV, 2015). Besides, men had expressed disappointment with how uninformed they were about the healthcare services available (Coles *et al.*, 2010). Men felt that their lack of health knowledge and awareness had a detrimental influence on their health because they were unable to identify health problems in their early stages or adequately articulate their difficulties to the primary healthcare providers (Coles *et al.*, 2010). Lack of health education and promotion focusing on men's health and services might be the underlying cause for the lack of knowledge and awareness. In addition, men also voiced out the lack of recommendations for certain health screenings, such as cancer and mental health screening by the physician, as they focused more on cardiovascular disease screening (Teo *et al*., 2017). Therefore, health education programs for men must be successfully executed to enhance health-seeking behaviour among target populations, including men (Dzinamarira *et al*., 2020).

Health promotion for men should be done using a male-specific approach and by trained healthcare providers (Robertson *et al*., 2013). Using 'male-sensitive' language and activity-based approaches can permit positive emotional displays, encourage social interaction, and create a foundation for open communication (Robertson *et al.*, 2018). Besides, men preferred an approach that is straightforward, direct, and practical (Coles *et al.*, 2010). Furthermore, health promotion for men should focus on equitable distribution of and access to material resources and individualistic approaches that serve men in economically and socially disadvantaged locations (Robertson & Baker, 2017). Men

desired health information in as many places as possible where they could view it frequently, and the usage of the internet to engage with men was recommended as it provides easy access and is confidential (Coles *et al.*, 2010).

Utilizing male role models to talk about their mental health experiences and help-seeking stories would inspire hope and reduce the perceived negatives associated with help-seeking (Sagar-Ouriaghli *et al*., 2020). In addition, a respected gentleman who talks about men's health issues and is involved in the program may influence men to join the program (Sagar-Ouriaghli *et al.*, 2020).

Table 2-2: Summary of important literature findings on health promotion and education

Topic	Literature findings	Author & Years
Men's lack of health literacy and awareness	• Men commonly lack knowledge and awareness of health in general, specific diseases, and risk factors compared to women • Men were disappointed with how uninformed they were about the health services available to them, which can negatively impact their health-seeking behavior and health outcome	(DHHSV, 2015) (Coles *et al.*, 2010)
Male-sensitive approach	• Usage of 'male-sensitive' language and activity-based approaches can permit positive emotional displays, encourage social interaction, and create a foundation for open communication	(Robertson *et al.*, 2018)
Done by trained healthcare providers	• Appropriate training for those involved in men's health promotion intervention was identified as one of the keys to success in previous men's health promotion	(Robertson, Witty & Day, 2013)
Equitable distribution of and access to	• Health promotion for men should focus on equitable distribution of and access to material resources and individualistic approaches that	(Robertson & Baker, 2017)

health promotion	serve men in economically and socially disadvantaged locations • Men wanted health information available in as many places as possible where they could view if frequently	(Coles *et al.*, 2010)
Male-role model	• The use of the male-role model to educate men by sharing experiences and stories would inspire hope and reduce the perceived negatives associated with help-seeking	(Sagar-Ouriaghli *et al.*, 2020)

2.2.3 Healthcare Providers' Characteristics

Patients who experience the poorest quality relationships with physicians were reported to be three times more likely to voluntarily leave the physician's practice than patients with the highest-quality relationship (Safran *et al.*, 2001; Browne *et al.*, 2010). A qualitative study among middle-aged and older men revealed that some participants had experienced variety in terms of competency level of the treating doctors, as some doctors described as good and some were not (Coles *et al.*, 2010).

Most males favoured trustworthy physicians, especially those they were familiar with (Teo *et al*., 2017). However, some men experienced that the physician did not listen well, provide good explanations, and did not allow them to ask questions (Teo *et al*., 2017). For example, the quote below was taken from one of the qualitative participants in a study assessing factors influencing young men's decision for health screening by Teo *et al*., (2017):

"Some of them have the tendency not to listen to me, and they kind of like to jump to conclusion. I wanted to ask more questions, but the doctor wasn't in the mood to entertain my questions." (Chinese, Officer)

Some men had negative views of doctors based on their past experiences, which largely centered on doctors providing using various or inconsistent diagnoses, telling them what they already knew (and charging them for it), or treating only the most visible symptoms (Novak *et al.*, 2019). Good knowledge and clinical practice might prevent these negative views of men and promote patients' trust in healthcare providers.

For most men, the gender of the physician is unimportant, except for sexual or reproductive health issues, for which most preferred a male healthcare provider (Smith *et al.*, 2008). However, some groups of men might prefer physicians of similar gender for both general health services and SRH services. A local study on factors influencing young men's decision to undergo health screening in Malaysia, revealed that Muslim men usually preferred physicians of similar gender, as they found it is more convenient to build mutual understanding and felt more comfortable with a male physician, especially when discussing sexual health issues, or undergoing genital or rectal examinations (Teo *et al*., 2017).

In addition, certain men prefer direct, result-oriented, and decisive communication with healthcare providers (Smith *et al.*, 2008). Many men prefer speaking to someone they know or have been briefly introduced to before discussing sensitive health issues (Sagar-Ouriaghli *et al.*, 2020). This highlight the importance of having good communication skill among healthcare providers in providing health service to the group. In addition, a healthcare provider that uses 'male-sensitive' language in communication allows for positive expressions of emotions and provides a base for open communication with men (Robertson *et al.*, 2018).