



AcE-Bs2022Cherating

<https://www.amerabra.org>

10th Asian Conference on Environment-Behaviour Studies
Holiday Villa Beach Resort, Cherating, Malaysia, 08-09 Jun 2022



Men Health Seeking Behaviour: A Literature Review

Nik Nairan Abdullah ¹, Mohd Haffis Mohd Arsat¹, Noor Rafizah Aminah Aziz², Waqar Al-Kubaisy ³

¹ Public Health Medicine Department, Faculty of Medicine, Universiti Teknologi MARA, Selangor, Malaysia

² Kuala Selangor District Health Office, Selangor, Malaysia, ³ Faculty of Medicine, Mutah University, AlKark, Jordan

Emails:
niknairan@gmail.com; haffisarsat@gmail.com; rafizah76@gmail.com; waqar_abd@yahoo.co.uk
Tel: 0060361267214

Abstract

Gender equality between males and females is a Sustainable Development Goal (SDG) that the nation must address. However, compared to women, the health status of men lags. The **objectives** are to describe and summarize the factors influencing men's health-seeking behaviour in various health problems from published literature. **Methods:** The literature search was performed using online databases in Scopus, Web of Science and ScienceDirect. **Findings:** In a total of 22 studies that fulfilled the inclusion criteria, the factors identified were predisposing factors (socio-demographic, health belief), enabling factors (healthcare services and facilities, alternative medicine, social support), and need factors (perceived need).

Keywords: Men; Health-seeking; Factors; Review

eISSN: 2398-4287 © 2022. The Authors. Published for AMER ABRA cE-Bs by e-International Publishing House, Ltd., UK. This is an open access article under the CC BY-NC-ND license (<http://creativecommons.org/licenses/by-nc-nd/4.0/>). Peer-review under responsibility of AMER (Association of Malaysian Environment-Behaviour Researchers), ABRA (Association of Behavioural Researchers on Asians/Africans/Arabians) and cE-Bs (Centre for Environment-Behaviour Studies), Faculty of Architecture, Planning & Surveying, Universiti Teknologi MARA, Malaysia.
DOI: <https://doi.org/10.21834/ebpj.v7i20.3484>

1.0 Introduction

According to World Health Organisation, health is a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity. It is the right of all human beings regardless of race, religion, political belief, and socioeconomic condition. It is in line with one of the sustainable development goals, achieving gender equality between males and females, including the health state. However, compared to women, the health status of men lags. It showed by the lower life expectancy of men than women. In 2016, the mean difference in life expectancy over 198 countries showed that females exceeded males by 4.85 years. The gap is more prominent in Eastern Europe countries, such as 10.5 years in Kazakhstan and 8.12 years in Russia. A meanwhile smaller gap in several Asian countries, 0.22 years in Maldives and 0.26 years in Nepal. Besides that, mortality rates are twice as high in men with chronic diseases, especially cardiovascular and cancers, as the leading causes of death (Crimmins, Shim, Zhang, & Kim, 2019).

Besides gender, people's health is affected by the condition in which they are born, grow, live, work, and age. All these factors will influence an individual's health-related behaviour, which is the actions are taken that can cause impact their health. One example of health-related behaviour is health-seeking behaviour (HSB). It is any action undertaken by individuals who perceive themselves to have a health problem or be ill to find an appropriate remedy. It is preceded by a decision-making process that is further governed by individuals and/or household behaviour, community norms, expectations, and provider-related characteristics and behaviour (Oberoi, Chaudhary, Patnaik, & Singh, 2016). The present review aims to summarize the current studies on men's HSB and identify its factors in various diseases.

eISSN: 2398-4287 © 2022. The Authors. Published for AMER ABRA cE-Bs by e-International Publishing House, Ltd., UK. This is an open access article under the CC BY-NC-ND license (<http://creativecommons.org/licenses/by-nc-nd/4.0/>). Peer-review under responsibility of AMER (Association of Malaysian Environment-Behaviour Researchers), ABRA (Association of Behavioural Researchers on Asians/Africans/Arabians) and cE-Bs (Centre for Environment-Behaviour Studies), Faculty of Architecture, Planning & Surveying, Universiti Teknologi MARA, Malaysia.
DOI: <https://doi.org/10.21834/ebpj.v7i20.3484>

2.0 Literature Review

HSB among men is poorer than among women. Males with mental or substance abuse disorder have lower odds than females regarding health professional consultation, utilization of support service or self-management, and general practitioner consultation even with the severe disorder(Harris et al., 2016). Low HSB can cause poor health outcomes, increased morbidity, mortality, and lower health statistics(Crimmins et al., 2019).

Previous studies on HSB were identified mainly in three areas: sex-related illness, chronic diseases, and infectious diseases. Sex-related illnesses included erectile dysfunction, premature ejaculation, and diseases related to same-sex sexual relationships. Chronic diseases were mainly related to diabetes mellitus, while infectious diseases were diseases such as gonorrhoea and HIV(Arumugam et al., 2020).Men are less likely to seek help for mental health problems because of many factors such as masculinity, health belief, attitudes, and less frequent contact with health services(Brown, Sagar-Ouriaghli, & Sullivan, 2019).

According to Andersen's behavioural model, people's use of health services depends on their predisposition to use services, factors that enable or impede use, and their need for care. Predisposing factors include socio-demographic and health beliefs (attitude, values, and knowledge regarding health and services). Enabling factor is the availability of necessary resources both of the community and personnel required to access care, such as health personnel, health facilities, financial ability, and social relationship. Lastly, the need factor is individual perception of their health and functional state or by someone else, for example, healthcare providers(Andersen, 1995). Thus, to increase the utilization of health services among men, identifying factors that become barriers or facilitators of health-seeking behaviour is essential for public health intervention.

3.0 Methodology

A thorough literature search was performed using online databases in Scopus, Web of Science and Science Direct. Using the Boolean operator, the keywords used for the search were factors, predictors, health-seeking, help-seeking, treatment-seeking, men, and male. The search only comprised primary and secondary studies published from 2017 until 2022. The articles cited by the selected studies were also screened for relevant work. Studies included in this review assessed the health-seeking behaviour among men regarding any health-related problem in any country. However, the search consists of only the original English language study and males age 18 and above as the study population. The Articles retrieved were screened using the criteria. All essential information and factors were extracted from selected studies: Descriptive features of the study, research design, socio-demographic and sample characteristics, the health-related problem studied and factors of men's health-seeking behaviour.

4.0 Findings

Based on the literature search, 22 original research was identified, ten cross-sectional, ten qualitative, one prospective cohort, and one mixed-method study. There were two studies conducted in Ireland, 1 in Taiwan, 4 in China, 1 in Saudi Arabia, 4 in the USA, 2 in Australia, 1 in South Africa, 3 in Malaysia, 2 in Denmark, 1 in Nepal, and 1 in Malawi.

The number of studies assesses help-seeking behaviour among men according to the health problem were as follows: four studies on sexually transmitted disease, three studies on erectile dysfunction, two studies on Human Immunodeficiency Virus infection, and one study each on psychological distress, benign prostatic hyperplasia, testicular disorder, sexual violence, mental health problems, alcohol abuse, sexual dysfunction, severe obesity, lower urinary tracts infection, cancer, acute illness, hepatitis C virus, and Tuberculosis. Five studies sampled homosexual groups. Overall, the proportion of men seeking help ranged from 5.94% in mental health problems to 54% in erectile dysfunction. Below is the summary of each study included in the review (table 1).

Table 1: Factors of health-seeking behaviour among male

Country, Author	Study population/ Disease	Method	Sought treatment (%)	Factors (Barrier/Facilitator) treatment-seeking
Ireland,(Cleary, 2017)	N=52, Psychological distress	Qualitative	20%.	Barrier: Masculinity, fear of peer stigma, lack of knowledge, dysfunctional coping, and negative attitude to psychiatric treatment.
Taiwan,(Fan, Lin, Huang, & Chen, 2017)	N=101, BPH	Cross-sectional	NA	Facilitator: Bothersome urinary symptoms
China, (Ren et al., 2017)	N=2383, MSM	Cross-sectional	15.9%	Barrier:

	HIV			Lack of knowledge, lower-income group
Ireland, (Saab, Landers, & Hegarty, 2017)	N=29 Testicular disorder	Qualitative descriptive	NA	Barriers: Lack of knowledge, symptom misappraisal, coping (denial and avoidance), health beliefs and attitudes, social & cultural factors. Facilitator: Access to social support, disease severity, inherent health-seeking drive, perceived threats, cultural factors
China, (Xu et al., 2017)	N=1096, MSM, STD	Cross-sectional study	35.7%	Facilitator: Education, having obvious STD-related symptoms, being HIV infected Barrier: Monthly income ≤500USD, currently syphilis infected, and HSV-2 infected
Saudi arabia,(Almigbal & Schattner, 2018)	N=309, ED	Cross-sectional	NA	Barrier: Age above 60, severe ED, "it may embarrass my doctor," and "It is a personal issue."
USA,(Donne et al., 2018)	N=32, Sexual violence	Qualitative	11%	Barriers: Gender/masculinity norm, psychological impacts, cost, insurance, scheduling issues, trust and fit
Australia,(Milner, King, Scovelle, Currier, & Spittal, 2018)	N=6447 Mental health problem	Prospective Cohort Study	5.94%	Barrier: Male gender norms, work in heavily male-dominated occupations. Facilitator: Higher-income, poorer mental health.
South Africa, (Nyalela, Dlungwane, Taylor, & Nkwanyana, 2018)	N=134, STD	Cross-sectional study	NA	Barrier: Participants who sought medical help for an STI when having a severe illness were more likely to delay seeking treatment, and men delayed visiting the clinic if they were HIV-negative. Facilitator: Educational level
USA, (Valdez, Garcia, Ruiz, Oren, & Carvajal, 2018)	N=20 Alcohol abuse	Qualitative	NA	Structural barrier Cost, efficacy of treatment, linguistic and cultural barriers between patient and provider. Sociocultural barrier Perceived cultural normalization, a buddy's advice, negative perceptions of known treatment, pride kill. Individual Barriers Lack of individual understanding of treatment purpose and goals.

USA,(Johnsen et al., 2019)	N=277, Sexual dysfunction	Cross-sectional	20.4%	Facilitator: The presence of post-injury sexual dysfunction, being married or in a partnership, having private insurance.
USA, (Jolles et al., 2019)	N=25, Severe obesity	Qualitative	NA	Facilitator: Improving physical and psychological health, enhancing the quality of life, fear of death, and having exhausted all other weight loss options.
Malaysia, (Lim et al., 2019)	N=20, MSM HIV	Qualitative	NA	Barriers Fear of stigma, confidentiality, the dismay of the complicated procedures of HIV treatment, HIV is an incurable disease, feeling of hopelessness and refused treatment, cost, complementary and alternative medicine. Facilitators Support from peers and family members, encouragement from health care providers. Personal strength or resilience.
Malaysia(Ramli, Shuid, Pakri Mohamed, Tg Abu Bakar Sidik, & Naina Mohamed, 2019)	N=50, ED	Cross-sectional	54%	Facilitator Education level, marital status
Denmark,(Rubach, Balasubramaniam, Storsveen, Elnegaard, & Jarbol, 2019)	N=21,838 LUTS	Cross-sectional	17.7%	Facilitator: Increasing age and symptom burden
Australia (Fish, Prichard, Ettridge, Grunfeld, & Wilson, 2019)	N=21 Cancer.	Qualitative	NA	Barrier: Lack of knowledge, traditional masculine norms, level of concern, conflicting responsibilities and difficulty with access and trust in medical professionals. Facilitator: Spousal support .
Malaysia (Arumugam et al., 2020)	N= 423, Acute illness	Mixed method	35.4%	Barrier: Income above RM 3100 had a higher probability of engaging in inappropriate HSB compared to those earning <RM 3100, preference for alternative treatment, preference to self-treat, and the stage when seeking treatment. Facilitator: Married, health literacy, the perceived threat of the illness, and the influence of family members and others.
Nepal (Jahangir, Shrestha, Alhaan, & Meyer, 2020)	N=18 STD	Qualitative	NA	Barrier: Level of STI screening knowledge, complex process, concerns regarding management if the test positive, uncomfortable in the physical screening, providers of the opposite gender. Uncomfortable in disclosing illness history, stigma, and inadequate space to ensure confidentiality.

				Facilitator: Mental stress following diagnosis and fear of judgement from their respective communities, wanted to get cured, not stay in constant doubt, and fear contracting more severe conditions.
China (Li, Yue, Wang, & Gong, 2020)	N=628, MSM STD	Cross-sectional	51.3%	Barrier: Younger age, lower-income, not knowing own STI risk, no symptoms of anogenital ulcers or anogenital wart, no syphilis testing in the past 12 months.
Denmark (Paulsen, Sørensen Bakke, Jarbøl, Balasubramaniam, & Hansen, 2020)	N= 4289, ED	Cross-sectional	31.8%	Facilitator: Older age up to the age group 60–69-year-old. Barrier: Individuals rate their physical fitness as poor.
China (Wang, Cui, Long, Mu, & Zeng, 2021)	N=20, MSM HCV	Qualitative	NA	Barrier: Individual perceptions: knowledge about severity and susceptibility of HCV infection Demographic, psychosocial, and structural factors: stigmatization and privacy disclosure. Perceived barriers: the accessibility of services, privacy protection. Facilitator Perceived benefits: being motivated to have safe sexual behaviours in the future and to have regular disease detection.
Malawi (Phiri et al., 2021)	N=30, TB	Qualitative	NA	Barriers Precarious economic conditions, difficult working conditions, gendered social norms. Constraints within the health system.

Abbreviation: Men who have sex with men (MSM), Benign Prostatic Hypertrophy (BPH), Human Immunodeficiency Virus (HIV), Sexually Transmitted Disease (STD), Erectile Dysfunction (ED), Lower Urinary Tract Symptoms (LUTS), Hepatitis C Virus (HCV), Tuberculosis (TB), United States of America (USA)

5.0 Discussions

Various frameworks are related to the behavioural change model, for example, protection motivation theory (PMT) and the health belief model (HBM). PMT postulates that individuals evaluate potential responses through a threat and coping appraisal process. The threat appraisal process includes assessing the severity and the likelihood of the threat happening. The coping appraisal process includes consideration of the efficacy of the response, how difficult the response is to carry out and the perceived self-efficacy of enacting the coping response (Shillair, 2020). Meanwhile, HBM suggests a person's belief in a personal threat of an illness or disease, together with a person's belief in the effectiveness of the recommended health behaviour or action, will predict the likelihood the person will adopt the behaviour (LaMorte, 2019). However, for this review, the factors identified are explained according to Andersen's Behavioural model, which includes the environment, facilities, finance and human resources.

5.1 Predisposing factors

Socio-demography

Age & education level

Increasing age and a higher level of education significantly increase the likelihood of seeking treatment (Nyalela et al., 2018; Rubach et al., 2019; Xu et al., 2017).

Culture

A study on alcohol abuse HSB showed that the perceived cultural normalization of alcohol overconsumption in their social circles makes

it challenging to look at it as problematic behaviour. If there is an issue with alcohol abuse, they will consult their friend or closest drinking companions for advice instead of professional health. A buddy's advice will influence the health-seeking behaviour of a man (Valdez et al., 2018).

Health beliefs

Conformity to gender norm.

The traditional concept of gender within a society shaped a different form of expectation between men and women, leading to different behaviour and risks. Men are less likely to seek treatment because they perceive any expression of symptom or concern as weak and not masculine. They prefer to conceal the symptom (Cleary, 2017; Donne et al., 2018; Fish et al., 2019; Milner et al., 2018; Phiri et al., 2021; Saab et al., 2017). Seeking treatment is killing their pride as it means that they admit to losing self-control and self-reliance and are perceived as emasculating (Valdez et al., 2018).

Knowledge

Lack of knowledge about a particular disease causes men to be unable to perceive themselves as sick and fail to recognize the manifestation of the disease, its severity, own risk, and its attribution, further impeding the treatment-seeking (Cleary, 2017; Li et al., 2020; Ren et al., 2017; Saab et al., 2017). Men who delayed treatment-seeking perceived a symptom as not bothersome, intermittent, and sought help only when it became severe or prolonged (Fish et al., 2019).

Attitude to treatment

A negative attitude toward professional health treatment makes them doubtful if the therapy is effective as they see no changes or improvement (Cleary, 2017). The particular disease is incurable, causing them to feel hopeless and refuse treatment, as in HIV cases (Lim et al., 2019). The feeling of embarrassment or thinking it is a personal issue to discuss with the medical provider is significantly associated with unwillingness to seek treatment for sexual dysfunction (Almighal & Schattner, 2018). However, those with inherent good health-conscious drive would not wait for a symptom to worsen, encouraging help-seeking faster (Saab et al., 2017).

Coping mechanism

Coping is the thought and behaviour mobilized to manage internal and external stressful situations. However, many are likely to engage in health-risk behaviour as a dysfunctional coping mechanism (Algorani & Gupta, 2021). Denial and avoidance used to cope with the stress of the illness caused men to delay help-seeking (Saab et al., 2017). Among victims of sexual violence, thinking and talking about the experience can raise negative emotions. This led to the rejection of reaching out for services, with self-reliance being their primary coping approach (Donne et al., 2018). Some men also use alcohol and drugs to cope with the distressing symptom as self-medication, which causes them not to seek help (Cleary, 2017).

Perceived benefit

It refers to a person's perception of the effectiveness of various actions available to reduce the threat of illness. Able to perceive the treatment may improve physical and psychological health, enhance the quality of life, and be sure about the health state may facilitate health-seeking behaviour among men (Jahangir et al., 2020; Jolles et al., 2019).

5.2 Enabling factors

Affordability and accessibility of healthcare services

The affordability of health services can become a barrier for help-seeking because of the expensive cost, which can increase when the condition worsens. Some cannot take time off work or work with no paid sick leave; this means they will lose their source of income for that day. Men who delay help-seeking commonly have conflicting responsibilities and demands within their help-seeking accounts (Donne et al., 2018; Fish et al., 2019; Jahangir et al., 2020; Lim et al., 2019; Phiri et al., 2021; Valdez et al., 2018).

Income and financial condition would determine the treatment-seeking behaviour of an individual. Men with higher income and having private insurance were significantly associated with greater treatment-seeking (Johnsen et al., 2019; Milner et al., 2018; Xu et al., 2017). Besides that, the state of health facilities, such as overcrowding, lack of privacy, long waiting times, gender of clinicians, lengthy treatment procedures, and linguistic barriers, can prevent health-seeking. Those in the rural area find it is difficult to access health services because of limited numbers of facilities and operation working hours, long distances, and limited medication supply (Fish et al., 2019; Jahangir et al., 2020; Lim et al., 2019; Phiri et al., 2021).

Confidentiality, trust, and the stigma of healthcare personnel

Fear of stigma and worry the healthcare providers would breach confidentiality and reveal their status to others may have consequences on family relationships and social networks, risking them to stigma and discrimination in the community (Donne et al., 2018; Fish et al., 2019; Jahangir et al., 2020; Lim et al., 2019; Wang et al., 2021). Previous unpleasant experiences with health providers also can become a barrier (Phiri et al., 2021; Wang et al., 2021).

Complementary and Alternative Medicine

Preference for other treatment types such as relying on regular exercise, eating well, and nutrient supplements to boost their immune system as alternatives to HIV care and in a study among civil servants, a preference for traditional medicine, for example, herb intake, a particular food, or traditional healers, causing a delay in treatment-seeking (Arumugam et al., 2020; Lim et al., 2019).

Support from family, partners, and health professionals

Support from family members, peers, and especially life partners is an essential factor influencing men's health-seeking decisions (Fish et al., 2019; Saab et al., 2017). Studies showed that being married or in a stable relationship is significantly associated with health-seeking behaviour than those who are single (Arumugam et al., 2020; Johnsen et al., 2019; Ramli et al., 2019). Professional health support from attending physicians can motivate men to seek help (Lim et al., 2019).

5.3 Need factors

Perceived need

Perceived need is how people view their general health and functional state, how they experience symptoms of illness, pain, and worries about their health, and whether or not they judge their problems to be of sufficient importance and magnitude to seek professional help (Andersen, 1995). Men who perceive the disease symptoms as severe, painful, troublesome & burdensome to their daily life will be more likely to seek treatment (Almigbal & Schattner, 2018; Fan et al., 2017; Rubach et al., 2019).

Meanwhile, men most likely will not seek help when the disease has mild symptoms. In a study, homosexual men infected with syphilis and HSV-2 were less likely to seek treatment in clinics because symptoms of these two diseases are easily neglected in their early stages (Xu et al., 2017).

The review has particular limitations. Some of the studies use qualitative design uses convenience sampling, which limits the generalization to men population. A cross-sectional study design could not elicit the causal relationship between outcome and exposures. As the review include studies on various disease, certain disease-specific predictor may be excluded in the review to fit with the Andersen behavioural model factors classification.

6.0 Conclusion & Recommendation

Three main factors were identified, predisposing (socio-demography & health belief), enabling (healthcare facilities, healthcare services, social support), and need (perceived need) factors. Age 45 to 60 years old, higher level of education, high-income group, men with good health-conscious, able to perceive the benefit, receive good social support, and assess the need will likely seek treatment. This review highlights the multifactorial that can influence men's health-seeking behaviour and causes lower healthcare utilization among men than women. Healthcare facilities and personnel factors received less attention in men HSB studies. Healthcare providers have a role in addressing poor health-seeking behaviour by understanding men's beliefs, values, and reactions to health services and ill-health. The study of men's help-seeking behaviour thus has the potential for bettering both men's and women's lives and reducing healthcare costs. Further study is recommended to focus on developing appropriate and effective interventions to increase health care utilization among men and explore its role in men's help-seeking behaviour.

Acknowledgements

The authors would like to thank the Ministry of Health NMRR-21-826-59345 (IIR) and the UiTM ethics committee, who has granted permission to conduct a study on treatment-seeking behaviour for erectile dysfunction.

Paper Contribution to Related Field of Study

This paper may contribute to help in increasing the utilization of healthcare services among men and for policymakers in the provision of accessible healthcare services and male-friendly services.

References

- Algorani, & Gupta. (2021). Coping Mechanisms. [Updated 2021 May 3]. In: StatPearls [Internet]. Treasure Island (FL): StatPearls Publishing; 2022
- Almigbal, T. H., & Schattner, P. (2018). The willingness of Saudi men with type 2 diabetes to discuss erectile dysfunction with their physicians and the factors that influence this. *PloS one*, 13(7), e0201105.
- Andersen, R. M. (1995). Revisiting the Behavioral Model and Access to Medical Care: Does It Matter. *Journal of Health and Social Behavior*, 36(1), 1-10.
- Arumugam, P., Tengku Ismail, T. A., Daud, A., Musa, K. I., NA, A. H., Ismail, S. B., & Mohd Said, Z. (2020). Treatment-Seeking Behavior Among Male Civil Servants in Northeastern Malaysia: A Mixed-Methods Study. *International journal of environmental research and public health*, 17(8).
- Brown, J. S. L., Sagar-Ouriaghli, I., & Sullivan, L. (2019). Help-Seeking Among Men for Mental Health Problems. In J. A. Barry, R. Kingerlee, M. Seager, & L. Sullivan (Eds.), *The Palgrave Handbook of Male Psychology and Mental Health* (pp. 397-415). Cham: Springer International Publishing.

- Cleary, A. (2017). Help-seeking patterns and attitudes to treatment amongst men who attempted suicide. *J Ment Health*, 26(3), 220-224.
- Crimmins, E. M., Shim, H., Zhang, Y. S., & Kim, J. K. (2019). Differences between Men and Women in Mortality and the Health Dimensions of the Morbidity Process. *Clinical chemistry*, 65(1), 135-145.
- Donne, M. D., DeLuca, J., Pleskach, P., Bromson, C., Mosley, M. P., Perez, E. T., . . . Frye, V. (2018). Barriers to and Facilitators of Help-Seeking Behavior Among Men Who Experience Sexual Violence. *Am J Mens Health*, 12(2), 189-201.
- Fan, Y.-H., Lin, A. T. L., Huang, Y.-H., & Chen, K.-K. (2017). Health care-seeking behavior in benign prostatic hyperplasia patients. *Urological Science*, 28(3), 169-173.
- Fish, J. A., Prichard, I., Ettridge, K., Grunfeld, E. A., & Wilson, C. (2019). Understanding variation in men's help-seeking for cancer symptoms: A semistructured interview study. *Psychology of Men & Masculinities*, 20(1), 61-70.
- Harris, M. G., Baxter, A. J., Reavley, N., Diminic, S., Pirkis, J., & Whiteford, H. A. (2016). Gender-related patterns and determinants of recent help-seeking for past-year affective, anxiety and substance use disorders: findings from a national epidemiological survey. *Epidemiol Psychiatr Sci*, 25(6), 548-561.
- Jahangir, Y. T., Shrestha, A., Alhaan, F., & Meyer, S. B. (2020). Service user and healthcare provider perspectives on barriers for men using sexually transmitted infection services in public hospital of Nepal: a qualitative study. *Journal of Communication in Healthcare*, 13(4), 314-324.
- Johnsen, N. V., Lang, J., Wessells, H., Vavilala, M. S., Rivara, F. P., & Hagedorn, J. C. (2019). Barriers to Care of Sexual Health Concerns in Men Following Traumatic Pelvic Fractures. *J Sex Med*, 16(10), 1557-1566.
- Jolles, S. A., Alagoz, E., Liu, N., Voils, C. I., Shea, G., & Funk, L. M. (2019). Motivations of Males with Severe Obesity, Who Pursue Medical Weight Management or Bariatric Surgery. *J Laparoendosc Adv Surg Tech A*, 29(6), 730-740.
- LaMorte, W. W. (2019). The Health Belief Model, Boston University School of Public Health.
- Li, J., Yue, X., Wang, Y., & Gong, X. (2020). First Responses to the Symptoms of Sexually Transmitted Infections and Treatment-Seeking Behavior Among Men Who Have Sex With Men in 13 Cities in China. *Sexually transmitted diseases*, 47(1), 28-33.
- Lim, S. H., Alias, H., Kien, J. K. W., Akbar, M., Kamarulzaman, A., & Wong, L. P. (2019). A Qualitative Study of HIV "Test-and-Treat" Experience Among Men Who Have Sex With Men in Malaysia. *AIDS Educ Prev*, 31(3), 193-205.
- Milner, A., King, T. L., Scovelle, A. J., Currier, D., & Spittal, M. J. (2018). Treatment seeking by employment characteristics among Australian males: a longitudinal study from the Ten to Men study. *Public Health*, 165, 34-41.
- Nyalela, M., Dlungwane, T., Taylor, M., & Nkwanyana, N. (2018). Health seeking and sexual behaviour of men presenting with sexually transmitted infections in two primary health care clinics in Durban. *Southern African Journal of Infectious Diseases*, 1-6.
- Oberoi, S., Chaudhary, N., Patnaik, S., & Singh, A. (2016). Understanding health seeking behavior. *Journal of family medicine and primary care*, 5(2), 463-464.
- Paulsen, L. H., Sørensen Bakke, L., Jarbøl, D. E., Balasubramaniam, K., & Hansen, D. G. (2020). Associations between lifestyle, erectile dysfunction and healthcare seeking: a population-based study. *Scandinavian journal of primary health care*, 38(2), 176-183.
- Phiri, M. M., Makepeace, E., Nyali, M., Kumwenda, M., Corbett, L., Fielding, K., . . . MacPherson, E. E. (2021). Improving pathways to care through interventions cocreated with communities: a qualitative investigation of men's barriers to tuberculosis care-seeking in an informal settlement in Blantyre, Malawi. *BMJ Open*, 11(6), e044944.
- Ramli, Shuid, Pakri Mohamed, Tg Abu Bakar Sidik, & Naina Mohamed. (2019). Health-Seeking Behavior for Erectile Dysfunction in Methadone Maintenance Treatment Patients. *International journal of environmental research and public health*, 16(21).
- Ren, X. L., Wu, Z. Y., Mi, G. D., McGoogan, J. M., Rou, K. M., Zhao, Y., & Zhang, N. (2017). HIV care-seeking behaviour after HIV self-testing among men who have sex with men in Beijing, China: a cross-sectional study. *Infect Dis Poverty*, 6(1), 112.
- Rubach, A., Balasubramaniam, K., Storsveen, M. M., Elnegaard, S., & Jarbol, D. E. (2019). Healthcare-seeking with bothersome lower urinary tract symptoms among men in the Danish population: the impact of lifestyle and socioeconomic status. *Scandinavian journal of primary health care*, 37(2), 155-164.
- Saab, M. M., Landers, M., & Hegarty, J. (2017). Exploring awareness and help-seeking intentions for testicular symptoms among heterosexual, gay, and bisexual men in Ireland: A qualitative descriptive study. *Int J Nurs Stud*, 67, 41-50.
- Shillair, R. (2020). Protection Motivation Theory. In *The International Encyclopedia of Media Psychology* (pp. 1-3).
- Valdez, L. A., Garcia, D. O., Ruiz, J., Oren, E., & Carvajal, S. (2018). Exploring Structural, Sociocultural, and Individual Barriers to Alcohol Abuse Treatment Among Hispanic Men. *Am J Mens Health*, 12(6), 1948-1957.
- Wang, R., Cui, N., Long, M., Mu, L., & Zeng, H. (2021). Barriers to uptake of hepatitis C virus (HCV) health intervention among men who have sex with men in Southwest China: A qualitative study. *Health Soc Care Community*, 29(2), 445-452.
- Xu, J. J., Yu, Y. Q., Hu, Q. H., Yan, H. J., Wang, Z., Lu, L., . . . Shang, H. (2017). Treatment-seeking behaviour and barriers to service access for sexually transmitted diseases among men who have sex with men in China: a multicentre cross-sectional survey. *Infect Dis Poverty*, 6(1), 15.