# Men's Attachment to Masculinity and Preference in Accessing Primary Health Care Service in URBAN Area of Surabaya, Indonesia 

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#### Abstract

Men's attachment to masculinity is believed to contribute to the low access to health services. However, there is a paucity in the available literature to explain this further in Indonesia. This study aimed to narrow the gap by providing scientific evidence to explain whether a similar situation is occurring in Indonesia. We conducted a cross-sectional study involving 134 men aged $20-40$ years old who lived in Surabaya as participants. The ideology of masculinity, masculinity norms and the gender role conflict were assessed for their correlations with men's access to primary health care. Univariate analysis was employed to identify the studied variables; and bivariate analysis was conducted to the correlation with men's use of the primary health care services, using Spearman's correlation test. The men were moderately attached to the ideology of masculinity ( $52.2 \%$ ), masculinity norms ( $56.7 \%$ ) and have moderate gender role conflicts ( $53.7 \%$ ), and used the primary health care center for services ( $54.5 \%$ ). The bivariate analysis resulted that all the three studied variables did not correlate with men's access to primary health care centers ( $p=0.455,0.654,0.300$ respectively). The results refute the widely accepted notion and suggest that the men's attachment to masculinity did not contribute to their use of primary health care service. Instead, the men would access the primary health service as early as physical symptoms started to occur.


Keywords: Health service utilization, Indonesia, Masculinity, Men, Primary health care.

## Introduction

Globally, the rate of premature death in men is higher than that in women, and not less than $20 \%$ of the cases occurred before 65 years of age [1]. Such as in the United States, the rate reached 3.5 million, which is 500,000 far exceeding that of the women [2]. The World Health Organization's reported a similar phenomenon had occurred in different European and African countries [2]. The disparity was even more significant in the Southeast Asian region, in which the rate had reached 8 million cases, which is an excess of 1.5 million compared to the women's mortality rate. One of the major contributors was how men perceived health when they have to access health care services.

Men generally view their selves as stoic, do not complain about health, and are less likely to seek for health assistance [3, 4].

Instead, many of them adopted high-risk behaviors, such as cigarette smoking, poor diet, and driving and drinking [5]. These contribute to men's poor health outcomes, including vulnerability to illness, accidents and premature death [1, 6]. Additionally, poor health outcomes also resulted from their preference to delay accessing health care services [5].

In western societies, accessing health care immediately was often viewed destroying men's masculine identity [7]. Thus, reasons the delay in seeking help from health professionals [8]. This affects men's average life expectancy, which is generally lower than that of women. Such as in 27 European countries, men's life expectancies were 6 years shorter than the women ( 76.07 vs 82.21 years old) [9].

Likewise, in the United States, the average life expectancy in men is 5 years shorter than that in women [10]. Although there it is difficult to indicate that a similar situation is occurring in tropical countries, it was identified that premature death was more dominant in men when compared with that in the women (1001 vs 785) [2].

Men's help-seeking behavior is fundamentally influenced by the global label as masculinity [11], which constructs men to delay seeking health assistance when symptoms start to occur [5, 12]. In many cases, they ended up at a later stage of illness and poor prognosis [13]. Nonetheless, we found a paucity of published studies to inform a similar phenomenon is occurring in Indonesia. Despite, it is reported that in average Indonesian men have four years shorter life expectancy than the women counterpart due to chronic health problems [14].

This study was conducted with regard to the paucity of research to inform whether the similar phenomenon is also occurring in Indonesia, given the indication that the men were at a higher risk to have a cerebrovascular event per year [15] and a lower number of accessing primary health services (known as Puskesmas under the national health system) as compared with the women ( 200,789 vs 282,187 visits per year) [16]. In addition, there is a limitation in scientific evidence to explain how Indonesian men perceived health examinations and attachment to masculinity. Thus, this study aimed to add a little evidence to narrow the gap in the literature around the aforementioned topic.

## Methods

## Study Setting

This study was a cross-sectional in the aim to describe the level of men's attachment to masculinity and to analyze the correlation of the ideology and the norm of masculinity and primary health care service utilization in Surabaya, the second-largest city of Indonesia. The setting was selected about the diversity of the population in the city, representing the heterogeneity of men as a sample. We involved eleven (11) Puskesmas across the city to engage with as many male visitors as possible.

## Population and Sample

This study targeted men aged 20 years and older spread across the five regions of the city of Surabaya. No further inclusion criteria applied to reach potential samples to this study. We involved the assistance of one staff nurse in each of the public health center to reach the potential participants. Men who visited the public health center $s$ during the data collection period were offered to participate in the study.

## Data Collection

All data were collected electronically from June to July 2017 following individualelectronic consent, and no face-to-face interaction was made at all stages. We limited the data collection period due to the availability of resources that support this study. The questionnaires used in this study including Male Norms Role Inventory-Short Form (MNRI-SF) by Levant et al. in 2016 was used to assess the ideology of masculinity [17] and the Conformity of Masculine Norms Inventory-46 (CMNI46) by Parent and Moradi in 2009 was used to assess the masculinity norms [18].

The Gender Role Conflict Scale Instrument (GRCS-I) instrument by James O'Neil et al. in 2016 was employed to assess the participants' gender role conflict [19]. Men's visits to the public health center were identified using a questionnaire developed based on Health Behavior Inventory-20 (HBI20) by Levant et.al. in 2011 [20]. All permissions to use the aforementioned questionnaires were directly granted by the original authors.

With regards to the language differences used between the original questionnaire and the targeted participants, the forward translation technique was employed, and an expert based in a public health center was asked to review possible inadequate expressions and contents of the translated questions. All steps were designed closely following the World Health Organization's Process of Translation and Adaptation of Instruments [21].

The MRNI-SF consisted of 21 questions using likert-type scale with a range from 1 (strongly disagree) to 7 (strongly agree) [22].

Score categories of MRNI-SF were generated from mean counted of each sub-scale. Score higher than the average of each subscale indicates a greater endorsement of ideology masculinity [23, 24]. The CMNI-46 consists of 46 masculinity construction statements and a four-point likert scale, ranging from 1 (strongly disagree) to 4 (strongly agree) [25]. The masculinity norm is leveled according to the mean score of each subscale and interpreted as high and low. GRSC-I also uses agree or disagree statement-questions on a 6 -point scale ( $1=$ strongly disagree, $6=$ strongly agree) to identify men's thoughts and feeling about gender role [26].

The final score of each aforementioned instrument was categorized into low, moderate, and high using quartiles (Q1 and Q3 of the total score). The higher category of each ideology masculinity, masculinity norms, and gender role conflict refers to the higher endorsement and linearity between what has been said about and acts of masculinity. The moderate category refers to that men believe masculinity, however; they inconsistently selected acts and performed the ideals identified in masculinity norms, ideology masculinity, and gender role conflict. The low category refers to that men have a weak belief in norms of masculinity. Men believe that they can do everything without following the social construct of masculinity.

## Data Analysis

The collected data were cleaned for analysis. The analyses were performed using computer assistance. The data collected from each questionnaire were pooled using the Microsoft Excel® spreadsheet to describe the variables tested in this study. The correlations of variables and outcomes measured were then analyzed using computer assistance.

The variables were masculinity, masculinity norms, and gender role conflicts; men's access to the public health center was the measured outcome. The statistical test of Spearman's correlation was employed, and the p-value of $<0.05$ was selected to indicate a significant correlation between tested variables and measured outcomes. The ethical approval in this study was obtained through the Health Research Ethics Committee at the Universitas Airlangga and was declared feasible with assigned number 424-KEPK.

## Results

## Participants Characteristics

As many as 134 men visited the eleven public health centers provided consent and completed the electronic questionnaire. Most of the participants were in their early twenties ( $42.5 \%$ ) with the youngest was 20 years of age and the oldest was 40 years old. The majority of the participants were graduated from Senior High School (64.9\%) and Javanese by background (83.5\%) (see Table 1).

Table 1: Participants demographic characteristics ( $\mathrm{n}=134$ )

| Age | $\mathbf{n}$ | $\mathbf{\%}$ |
| :--- | :---: | :---: |
| $20-25$ years old | 57 | 42.5 |
| $26-30$ years old | 31 | 23.1 |
| $30-35$ years old | 23 | 17.2 |
| $36-40$ years old | 23 | 17.2 |
| Background |  |  |
| Javanese | 112 | 83.5 |
| Madurese | 17 | 13 |
| Chinese | 1 | 0.7 |
| Arab | 1 | 0.7 |
| Ambonese | 1 | 0.7 |
| Others | 2 | 1.4 |
| Level of education |  |  |
| Primary school | 1 | 0.7 |
| Junior high school | 5 | 3.8 |
| Senior High School | 87 | 64.9 |
| College | 41 | 30.6 |
| Total | 134 | 100 |

## Ideology Masculinity

The MRNI-SF measured seven components of the ideology masculinity of the participants. These included components to measure avoidance of femininity, negativity towards the sexual minority, self-reliance, toughness, dominance, the importance of sex, and restrictive emotionality. The higher the scale men have, the higher their attachment to the ideology of masculinity [27]. The result of this test indicated that most men in this study rejected feminine activities, such as being involved in emotional situations and verbally expressing their feelings to friends or colleagues (mean $\geq 3.5$ in each component). Similar results also occurred in the rest of the
tested components, suggesting that they wanted to be seen as masculine men. The MRNI-SF also resulted that the men were avoiding misperceptions about their sexual orientation (from being identified as homosexual), believing that sexual relationship is important, perceiving that it is important for men to have skills in repairing broken things in the house, and believing that men should be reliable and have control over women under their responsibilities (see Table 2). Nonetheless, our finding suggested that most men in this study did not always attach to the ideology, indicated by the final result of the test as to have a moderate ideology of masculinity (52.2\%).

Table 2: Level of ideology masculinity in men living in Surabaya

| Sub-scale | $\mathbf{n}$ | $\%$ |
| :--- | :---: | :---: |
| Avoidance of femininity |  |  |
| Low | 24 | 17.9 |
| High | 110 | 82.1 |
| Negativity toward sexual minorities |  |  |
| Low | 15 | 11.2 |
| High | 119 | 88.8 |
| Self-reliance |  |  |
| Low | 3 | 2.2 |
| High | 131 | 97.8 |
| Toughness |  |  |
| Low | 6 | 4.5 |
| High | 138 | 95.5 |
| Dominance |  |  |
| Low | 112 | 16.4 |
| High |  | 83.6 |
| Importance of sex | 18 | 13.4 |
| Low | 116 | 86.6 |
| High | 24 | 17.9 |
| Restrictive emotionality | 110 | 82.1 |
| Low |  |  |
| High | 32 | 23.9 |
| General Interpretation of Ideology Masculinity | 70 | 52.2 |
| Low | 32 | 23.9 |
| Moderate | 134 | 100 |
| High |  |  |
| Total |  |  |

## Masculinity Norms

The CMNI-46 questionnaire identified nine components of standards, including the sense of winning, emotional control, risk-taking, avoiding violence, frequently changing partner, self-reliance, power over women, being heterosexual, and giving workers the priority. The tendency over these components informs men's attachment to masculinity norms.[18] This study identified that most of
the men did not attach to the idea of always being a champion, found it more difficult to take control over their emotions, did not identify their selves as risk-takers, did not want to be involved in violence and did not change their partner or spouse frequently. Most of the participants disagreed that men should always be independent or dominant over the others. Instead, they viewed themselves as having the responsibility for the women under their
protection and prefer to present them as heterosexual to others. In addition, they also would not give much priority to work overtime (see Table 3).

All these resulted that most men in this study were categorized as moderately attached to the masculinity norms.

Table 3: Level of masculinity Norms of men living in Surabaya

|  | Sub-scale | $\mathbf{n}$ |
| :--- | :---: | :---: |
| Winning |  | \% |
| Low | 116 | 86.6 |
| High | 18 | 13.4 |
| Emotional control |  |  |
| Low | 108 | 80.6 |
| High | 26 | 19.4 |
| Risk-taking |  |  |
| Low | 92 | 68.7 |
| High | 42 | 31.3 |
| Violence |  |  |
| Low | 126 | 94.1 |
| High | 8 | 5.9 |
| Power over women |  |  |
| Low | 62 | 46.3 |
| High | 72 | 53.7 |
| Playboy | 129 | 96.3 |
| Low | 5 | 3.7 |
| High |  |  |
| Self-reliance | 132 | 98.6 |
| Low | 2 | 1.4 |
| High |  |  |
| Primacy of work | 70 | 52.3 |
| Low | 64 | 47.7 |
| High |  |  |
| Heterosexual self-presentation | 35 | 26.2 |
| Low | 99 | 73.8 |
| High | 32 | 23.9 |
| General Interpretation of Masculinity Norms | 76 | 56.7 |
| Low | 26 | 19.4 |
| Moderate | 134 | 100 |
| High |  |  |
| Total |  |  |

## Gender Role Conflict

The GRCCS-I measured men's perception over success, power, and competition; restrictive emotionality; restrictive affectionate behavior between men; and conflict between work and leisure-family relation.[19] The data gained using the GRCS-I questionnaire informed that most men in this study have high preference over challenges, the achievement of success, and power over situations (96.2 \%) (see Table 4). They did not want to be involved in emotional situations that were
identified from either the component of restrictive emotionality ( $87.3 \%$ ) nor parttaking in homosexual activities ( $92.5 \%$ ). These results confirming their preference over the ideology of masculinity. In further assessment, it is indicated that the men would feel awkward when expressing affection towards other men. It is indicated that the men would have problems prioritizing between time for work and to spend with families (82.1\%). All these informed that most men were moderately experiencing gender role conflict (53.7\%).

Table 4: Level of gender role conflict

| Sub-scale | $\mathbf{n}$ | \% |
| :--- | :---: | :---: |
| Success, power, and competition |  |  |
| Low | 5 | 3.8 |
| High | 129 | 96.2 |
| Restrictive emotionality |  |  |


| Low | 17 | 12.7 |
| :--- | :---: | :---: |
| High | 117 | 87.3 |
| Restrictive affectionate |  |  |
| Low | 10 | 7.5 |
| High | 124 | 92.5 |
| Conflicts between work and leisure-family relations |  |  |
| Low | 24 | 17.9 |
| High | 110 | 82.1 |
| General Interpretation of Gender Role Conflict | 33 | 24.6 |
| Low | 72 | 53.7 |
| Moderate | 29 | 21.7 |
| High | 134 | 100 |
| Total |  |  |

## The Ideology of Masculinity, Masculinity Norms, and Gender Role Conflicts and Its Correlations with Health Care Service Utilization

The access to primary health service was evaluated through HBI-20 questions that reflect men's tendency to visit health facilities for frequent health-checks, medication or regiments, and participation in
health promotion and disease prevention sessions. The result of this study suggested that more than half of the men in this study would access primary health care services for professional help when symptoms started to occur ( $54.5 \%$ ). Nonetheless, the other counterpart of the participants less likely accessed the Puskesmas for physical complaints (45.5\%) (see Table 5)

Table 5: Puskesmas service utilization of men living in Surabaya

| Lategory | $\mathbf{n}$ | \% |
| :--- | :---: | :---: |
| Low usage | 61 | 45.5 |
| High usage | 73 | 54.5 |
| Total | 134 | 100 |

The cross-tabulation of studied variables resulted in one-third of the men in this study had a moderate attachment to the ideology of masculinity and high health care utilization (31.3\%). This is inversely proportional when compared with men who had a strong bond to masculine ideology, as they were rarely accessing the Puskesmas for health service (13.5\%). Although, our analysis resulted that there was no significant correlation between the ideology and access to primary health
service $\quad(\mathrm{p}=0.455, \quad \mathrm{z}=0.065)$. Concerning masculinity norms and its correlation with access to health care service, there was no statistical difference found to support the idea that men with high masculinity norms have higher access to Puskesmas for health services ( $p=0.654, z=-0.039$ ). Likewise, no significant statistical result was found to support the correlation between gender role conflict and health care service utilization ( $p=0.300, z=0.300$ ).

Table 6: Cross-table analysis of variables in the study ( $\mathrm{n}=134$ )

| Variables | Health Service Utilization |  | Spearman's <br> test (P) | z score |  |
| :--- | :---: | :---: | :---: | :---: | :---: |
|  | High (\%) | Low (\%) |  |  |  |
| Ideology Masculinity |  |  |  |  |  |
| Low | $17(12.6 \%)$ | $15(11.3 \%)$ | $32(23.9 \%)$ |  |  |
| Moderate | $42(31.3 \%)$ | $28(20.9 \%)$ | $70(52.2 \%)$ |  |  |
| High | $14(10.4 \%)$ | $18(13.5 \%)$ | $32(23.9 \%)$ |  | 0.65 |
| Masculinity Norms |  |  |  |  |  |
| Low | $18(13.4 \%)$ | $14(10.5 \%)$ | $32(23.9 \%)$ |  |  |
| Moderate | $42(31.3 \%)$ | $34(25.4 \%)$ | $76(56.7 \%)$ |  |  |
| High | $13(9.7 \%)$ | $13(9.7 \%)$ | $26(19.4 \%)$ |  | 0.3039 |
| Gender Role Conflict |  |  |  |  |  |
| Low | $18(13.4 \%)$ | $15(11.2 \%)$ | $33(24.6 \%)$ |  |  |
| Medium | $35(26.2 \%)$ | $37(27.6 \%)$ | $72(53.8 \%)$ |  |  |
| High | $20(14.9 \%)$ | $9(6.7 \%)$ | $29(21.6 \%)$ |  |  |

## Discussion

This study evaluated the attachment of men living in Indonesia's second-largest city to the ideal masculinity, masculinity norm, and gender role conflict, and the correlation with their preference when using the available public health care center.

In this study, the public health center refers to Puskesmas, in which general practitioners and physicians, dentists, pharmacies, nurses, midwives, and allied health provide health promotion and prevention services, health consultation, as well as one day medical and surgical interventions. The findings in this study suggested that none of the tested variables were correlated with men's preference when using services from Puskesmas for health complaints. These inform that the ideal masculinity, masculinity norms and gender role conflicts were uniquely embraced by men in Surabaya and did not define access to primary health care services.

## The Ideology of Masculinity

The ideology of masculinity affects how men think, feel and behave [28, 29]. The men in this study were mostly moderately attached to the ideology of masculinity (52.2\%), suggesting that they identified their selves as strong and powerful individuals. This result is in line with findings in an earlier study by Pleck et al. in 1993 [30]. The men in this current study perceived that being a man should be reliable in most housework such as repairing cars, fixing damages of the house, and many others reflected through the questionnaire used.

The men in this study maintained that people would respond negatively when men act in a socially-accepted as feminine manners, like being unable to fix broken items in their houses. This view shares the same lights with an earlier study by McCreary in 1994 [31], in which the author found that men would avoid what is socially constructed as feminine. In a later study, it is indicated that men would avoid what is regarded as female roles or behaviors such as cooking, griping, watching soap operas, drama, and preening [32]. Men who were attached to the ideology traditionally view visiting health facilities for health assistance as weak and not masculine[33].

This lead to men's delayed access to health services and professional help [5, 7]. However, we found that the men in this study would not delay accessing Puskesmas when health issue starts to occur.

The current study indicates that there is no significant correlation between men's attachment to the ideology of masculinity and access to Puskesmas in Surabaya's urban community ( $\mathrm{p}=0.455$ ). This result contradicts earlier studies, which suggested that men who were attached to the ideology of masculinity were less likely to access health facilities early for physical complains [13, 34, 35]. This suggests that the men in the study were uniquely holding the ideology and refuting the view that visiting health facilities would effeminate their identities.

The aforementioned findings further inform that the ideology was not a barrier for the men lived in Surabaya to seek professional help when experiencing health problems. This is in contrast with the global notion that suggests men would delay seeking professional assistance for health issues.[8] This suggests that accessing health care service is considered normal for men when having a health issue and is not destroying their masculine identity, as highlighted in earlier studies [7, 33].

## Masculinity Norms

The men who participated in this study were moderately attached to masculinity norms ( 56.7 \%). They identified their self as heterosexual, dominant over women under their responsibility and avoiding expressing feeling to other men or other perceivedfeminine activities. The majority of the participants were Javanese by background or holding to Javanese value, which was yet explored for its correlation with men's health behavior in the current study. Our analysis found that the men were bound by the ideology of masculinity and gender roles but would access the Puskesmas when health symptoms started to occur. These findings suggest future studies to further explain the distinct findings.

The widely accepted masculinity norms have long been associated with men's avoidance in
health help-seeking and from physical complaints [7]. However, this did not apply in Indonesian urban communities like in Surabaya. Our analysis suggests that the moderate level of attachment to the norms did not contribute to the men's access to the Puskesmas service ( $p=0.654$ ). This explains that the norms did not have a marked impact on men's behavior and reasons for the proper use of Puskesmas.

The men participating in this study identified themselves as properly utilizing the service by Puskesmas. This was identified through the HBI-20 by Levant et.al. in 2011 [20] and suggesting that the men did not tend to delay accessing Puskesmas when health issues occurred.

Most of the men replied that the visit to the Puskesmas was for physical complaints or routine physical examinations. The HBI-20 identified that the men were complying with health professionals' advice, such as to prescribed medical interventions or referral for further examination at hospitals. However, it is indicated that the men were reluctant to participate in health education.

## Gender Role Conflict

Gender role conflict is defined as an internal process in persons who were adjusting to a certain gender appearance following the social norms [19]. This study found that most men were moderately experiencing gender role conflict (53.7\%) and confirm their effort to present themselves as masculine. This was manifested through their high preference for challenging activities, the achievement of success, and control over situations (96.2\%). Moreover, they did not want to be involved in emotional situations (87.3\%). The findings in this study showed that the presence of participants' internal conflicts in relation to presenting their gender is dictated by the social norms in their society.

Our analysis found that most of the men identified that expressing feelings to other men is unacceptable and is avoided. This indicates that the existence of a social norm in Surabaya's urban community sets the standard of masculinity norms as not too far in caring for their fellow men. The high level of restrictive emotionality restricts men in
this study to express feelings and find words for emotions.[36] Nevertheless, this finding recommends that gender role conflict has no significant correlation with men's primary health care services utilization ( $p=0.300$ ).

## Limitations

The results of this study were subject to potential biases from its sample size, data collection method, and limitation in explaining the cultural background of the participants. The generalizability of findings in this study should be taken with consideration due to the small sample size.

The nature of the electronic survey as the sole data collection method, through which no face-to-face interaction was made contains a high possibility of selection and acquiescence biases. Yet, this study was believed to be the first in Indonesia. In addition, the absence of further explanation in cultural background and its correlation with men's perspective when accessing health care service informs the significance of future research in the attempt to leverage men's general health outcomes.

## Conclusions

This research explains how primary health care facilities were used by men in the context of one Indonesian urban society. This research informs that the ideology of masculinity, masculinity norms and gender role conflict were unique in Indonesia and did not significantly correlate with men's access to primary health care services. Instead, they were most likely to access health care if health complaints occurred.

It is interesting to see that men's health service utilization was unique and distinct from the globally accepted notions. This finding narrows the gap in knowledge, particularly in providing evidence of how masculinity has been adopted by men concerning health behavior in Indonesia. Further, future studies are suggested to involve a larger sample for better and reliable generalization, particularly in the context of Indonesia.

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