Restrictive Masculinity Norms and Past-Year Checkup Among Young Adult Males and Females

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ABSTRACT

INTRODUCTION: Despite the benefits of regular checkups for early disease detection, many young adults skip routine care, a pattern linked to restrictive masculinity norms that discourage help-seeking.

METHODS: Including males and females from the 2024 Rhode Island Young Adult Survey (n=1,004), we examined the relationship between restrictive masculinity and checkup avoidance using multivariable logistic regression, adjusting for demographics, social status, student, employment, and insurance status.

RESULTS: 29.4% reported no past-year checkup. Each unit increase in the restrictive masculinity scale was associated with 1.05 (95% CI: 1.03–1.07) times the odds of no past-year checkup. Effects were consistent across both sexes.

DISCUSSION: To reduce barriers to annual healthcare, interventions must be gender-sensitive and tailored to individuals who endorse restrictive masculine norms. Education-based strategies can help reframe healthcare as a strength. For males and females, social support, inclusive programming, and strength-based models can increase comfort and motivation to seek care.

KEYWORDS: Restrictive masculinity; young adults; ;annual checkups preventive care

INTRODUCTION

Regular checkups administered by a primary care provider are critical in preventing and detecting disease, as well as improving health behaviors and outcomes. These visits provide patients the opportunity to learn how to improve or maintain their health through lifestyle and behavioral changes, as well as treat chronic conditions through various means.[1] In doing so, overall community health is also improved by lowering the prevalence of disease and its spread.[2] Preventive care is essential to screen for and manage some of the leading health issues for both males and females, such as heart disease, obesity, diabetes, and lung disease.[3] Primary care physicians also monitor patients for health issues that may disproportionately affect one particular sex.[4] For females, this is often focused on the prevention of heart disease, breast cancer, and stroke.[5-7] For males, screening for and treatment of obesity, colorectal cancer, and cardiovascular disease are particularly important.[8-10]

Despite the importance of these visits, one in five adults in the United States (US) has not seen a provider for a routine checkup within the last year.[11] In the US, this issue is particularly prominent among males, who are 24% less likely to have an annual checkup compared to females.[12] They are also less likely to have a regular source of care, such as a primary care provider.[13] When males do seek care, they are more likely to have brief visits focused on acute care, rather than preventive visits, and are less likely to ask questions[14] or get screening for sex-specific issues.[8-10,15] Men are also much less likely to seek mental health services, often waiting until a crisis point, likely contributing to the higher suicide rates in this population.[16] Further, the avoidance of care among men leads to higher rates of preventable illness and early death.[17]

While evidence suggests males are less likely to access healthcare, there is reason to believe that restrictive masculinity norms, rather than being biologically male, is a major driver in whether someone seeks an annual checkup. Restrictive masculinity norms encompass a set of traditional, rigid ideals of what it means to be a man, mainly embodying dominance, self-reliance, and invincibility.[18] While men tend to avoid help-seeking in relation to preventive care, this may be due to viewing help-seeking as a sign of weakness or dependence, in violation of these rigid masculine norms.[19] Research shows male avoidance of healthcare is often following the example of other male family members who avoid healthcare or adhering to the idea that males should not ask for help.[15,20] Similarly, men may avoid checkups due to fear of losing a sense of control or invincibility if a health problem is identified.[21]

While under-researched, restrictive masculinity norms may also lead to neglect of physical and mental health in females.[22] Research shows that females who endorse rigid masculine norms engage in more negative health behaviors, fewer positive ones,[23] and are more likely to avoid healthcare when their self-worth is tied to masculinity.[24] Additionally, there is a significant gap in our understanding of the overall relationship between regular checkups and restrictive masculinity, especially among young adults. To address these

concerns, this study examines whether belief in restrictive masculinity norms is associated with not having a checkup in the past year among Rhode Island young adults, and whether this holds for both males and females.

METHODS

Sample

The Rhode Island Young Adult Survey (RIYAS) was a confidential, self-reported, cross-sectional study conducted by the Rhode Island Department of Behavioral Healthcare, Developmental Disabilities & Hospitals. The 2024 survey was administered online through Qualtrics to collect data on young adults' behavioral health, risk behaviors, and mental and physical health outcomes. Eligible individuals were between the ages of 18 and 25 and resided in Rhode Island for at least part of the year. Recruitment strategies included paid advertisements on Instagram and Spotify, as well as outreach via flyers and emails to students at higher education institutions. To maintain data quality, the survey underwent rigorous internal validation processes. Participants were compensated with a $10 gift card for their participation. A total of 1,008 surveys were completed between June and September 2024. All participants provided electronic informed consent, and the study was approved by the local Institutional Review Board. Those included in this study were individuals who reported their sex assigned at birth as either male or female, removing the small sample of n=4 from the total sample who were intersex.

Measures

The primary outcome of the study is not getting an annual checkup, specifically not having a routine checkup in the past year versus having a routine checkup in the past year. This variable was defined by the survey question, "About how long has it been since you last visited a doctor for a routine checkup?" Those who responded "Within the past year (anytime less than 12 months ago)" were considered to have a routine checkup in the past year. All others responding "Within the past two years (one year but less than two years ago)" or "Within the past five years (two years but less than five years ago)" or "five or more years ago" were considered as not having a routine checkup in the past year.

The main exposure variable in this study is belief in restrictive masculinity norms assessed by the Restrictive Masculinity Scale, a 12-item questionnaire (**Table 1**). Example statements include "Men should be able to freely express their emotions through crying" and "Men should respect a woman's decision if she says no to sex." Participants responded to each statement using a scale from strongly disagree (coded as 0) to strongly agree (coded as 4), with three items being reverse-coded. Total scores ranged from 0 (indicating the least restrictive masculinity norms) to 48 (indicating the most restrictive masculinity norms).[25]

Other covariates measured in the study are those previously identified as potential risk factors for getting a routine checkup.[26-29] These covariates include sex assigned at birth (male/female), gender and sexuality (cisgender heterosexual/sexual and/or gender minority), race/ethnicity (White, Black, Hispanic, Asian, Other/Multiracial), age, social status, student status, employment status, and insurance status. Social status was measured using the MacArthur Scale of Subjective Social Status, where respondents rated their perceived standing in their community from 1 "worst off" to 10 "best off".[30] Student status was based on enrollment in high school or post-secondary education. Employment included part- or full-time work. Insurance status was assessed by asking if respondents had any form of health coverage.

Table 1. Questions from the Restrictive Masculinity Scale [25]

1. Men should provide for the financial needs of the household.
2. Men should care for children and complete household chores, like cooking and cleaning.
3. Men should earn more money than women.
4. Men should work in physical jobs, such as a construction worker, truck driver, or fisherman.
5. Men should be able to freely express their emotions through crying.
6. For men, work should be more important than anything.
7. Men should be strong, tough, and assertive leaders.
8. Men should have the final say in household decisions.
9. Men should control everything in the household.
10. Men should protect family members, especially women and girls.
11. Men should always be the one to initiate sex.
12. Men should respect a woman's decision if they say no to sex.

Statistical Analysis

Descriptive statistics, specifically means and standard errors for continuous variables and frequencies and percentages for categorical variables, were reported for the total sample and by past-year checkup. Bivariable statistics were assessed using two-sample t-tests for continuous variables and chi-square tests for categorical variables by past-year checkup. Multivariable logistic regression for not having a past-year checkup on restrictive masculinity scale was conducted controlling for sex assigned at birth, gender and sexuality, race/ethnicity, age, social status, student status, employment status, and insurance status. Adjusted odds ratios and 95% confidence intervals are reported. Reference categories were male, cisgender heterosexual, White, non-Hispanic, not being a student, not being employed, and having insurance. Fully adjusted models were then stratified by sex assigned at birth. All analyses were conducted at $\alpha = 0.05$ and all analyses were calculated in Stata/SE 15.0.[31]

RESULTS

In a sample of n=1,004 young adults, 29.4% had no past-year checkup. The mean age was 21.1 years (SE: 0.07) with a mean social status of 5.7 (SE: 0.06). The majority were female (72.1%) and cisgender heterosexual (56.4%). Most were White, non-Hispanic (57.3%), students (61.8%), employed (74.4%), and insured (75.5%). The mean restrictive masculinity score was 27.3 (SE: 0.24), with a higher score among those with no past-year checkup (p < 0.001). Mean age was higher among those with no past-year checkup (p < 0.001). Students were less likely to have no past-year checkup (p = 0.003), while those employed were more likely (p = 0.032). In the fully adjusted model, there was 1.05 (95%CI: 1.03, 1.07) times the odds of not having a checkup in the past year with each additional unit of the restrictive masculinity scale; and 1.17 (95%CI: 1.08, 1.26) times the odds with each additional year in age. When models were stratified by sex, the effect of restrictive masculinity score was consistent for each sex with the combined model [males AOR: 1.05 (95%CI: 1.01, 1.09); females AOR: 1.05 (95%CI: 1.02, 1.08)] (**Tables 2,3,4**).

Table 2. Sociodemographics of young adults by past-year checkup

	Total N=1,004 (%)	Past-Year Checkup N=709 (70.6%)	No Past-Year Checkup N=295 (29.4%)	P-value
Restrictive Masculinity [Mean(SE)]	27.3 (0.24)	26.7 (0.27)	28.8 (0.48)	**<0.001**
Sex Assigned at Birth				0.299
Male	280 (27.9)	191 (26.9)	89 (30.2)	
Female	724 (72.1)	518 (73.1)	206 (69.8)	
Gender and Sexuality				0.426
Cisgender Heterosexual	566 (56.4)	394 (55.6)	172 (58.3)	
Sexual and Gender Minority	438 (43.6)	315 (44.4)	123 (41.7)	
Race/Ethnicity				0.520
White, non-Hispanic	575 (57.3)	413 (58.3)	162 (54.9)	
Black, non-Hispanic	77 (7.7)	48 (6.8)	29 (9.8)	
Hispanic	197 (19.6)	139 (19.6)	58 (19.7)	
Asian, non-Hispanic	86 (8.6)	59 (8.3)	27 (9.2)	
Other/Multiracial, non-Hispanic	69 (6.9)	50 (7.1)	19 (6.4)	
Age	21.1 (0.07)	20.9 (0.09)	21.6 (0.12)	**<0.001**
Social Status [Mean(SE)]	5.7 (0.06)	5.7 (0.07)	5.6 (0.10)	0.432
Student				**0.003**
Yes	620 (61.8)	459 (64.7)	161 (54.6)	
No	384 (38.3)	250 (35.3)	134 (45.4)	
Employed				**0.032**
Yes	747 (74.4)	514 (72.5)	233 (79.0)	
No	257 (25.6)	195 (27.5)	62 (21.0)	
Insurance				0.205
Yes	758 (75.5)	543 (76.6)	215 (72.9)	
No	143 (14.2)	92 (13.0)	51 (17.3)	
Don't know/ not sure	103 (10.3)	74 (10.4)	29 (9.8)	

Note: P-values are calculated using two-sample t-tests for continuous variables and chi-square tests for categorical variables

Table 3.

	Adjusted Odds of No Past-Year Checkup	
	AOR	95%CI
Restrictive Masculinity Score	**1.05**	**1.03, 1.07**
Sex Assigned at Birth		
Male	1.00	ref
Female	1.02	0.73, 1.42
Gender and Sexuality		
Cisgender Heterosexual	1.00	ref
Sexual and Gender Minority	1.19	0.88, 1.63
Race/Ethnicity		
White, non-Hisanic	1.00	ref
Black, non-Hispanic	1.43	0.85, 2.40
Hispanic	1.06	0.73, 1.53
Asian, non-Hispanic	1.16	0.70, 1.92
Other/Multiracial, non-Hispanic	1.07	0.60, 1.90
Age	**1.17**	**1.08, 1.26**
Social Status	0.93	0.86, 1.01
Student		
Yes	1.00	0.72, 1.38
No	1.00	ref
Employed		
Yes	1.40	0.99, 1.99
No	1.00	ref
Insurance		
Yes	1.00	ref
No	1.36	0.91, 2.02
Don't know/not sure	1.12	0.69, 1.82

Table 4. Sex-stratified models for adjusted odds of no past-year checkup

Adjusted Odds of No Past-Year Checkup			
Males		Females	
AOR	95%CI	AOR	95%CI
1.05	**1.01, 1.09**	**1.05**	**1.02, 1.08**

NOTE: Models control for sex assigned at birth, gender and sexuality, race/ethnicity, age, social status, student status, employment, insurance status

DISCUSSION

Regardless of sex, believing in more restrictive masculinity norms hinders past-year checkups. The results showed almost an identical effect across males and females, further emphasizing that sex does not moderate this relationship.

Prior research suggests that restrictive masculinity is a significant barrier to healthcare utilization among males. For example, traits celebrated in restrictive masculinity norms, such as emotional control, self-reliance, and stoicism, are associated with avoidance of health services.[14] In adhering to traditional ideals of stoicism and control, men often suppress fear and delay medical attention to preserve a sense of normalcy and self-reliance.[32] Strong belief in these norms can lead to feelings of shame, embarrassment, or fear of being judged when reporting health concerns,[13] further discouraging men from seeking necessary care. Males, and particularly young adults, may also have a sense of invincibility due to these masculinity norms, viewing themselves as less vulnerable to illness and requiring fewer doctor visits.[19]

Research also indicates that restrictive masculine norms significantly hinder men's engagement with sex-specific healthcare, such as prostate cancer screening and treatment, despite being one of the most prevalent malignancies among this population.[32,33] As these norms discourage open communication about sensitive health issues to avoid appearing vulnerable, many men avoid discussing prostate health with physicians or seeking care, even when symptoms are present. Additionally, fear of diagnosis and the potential disruption to daily life may further deter men from seeking timely care.[32] Mental health care is similarly neglected, with fear of stigmatization emerging as a central barrier to help-seeking. Many men forgo psychiatric services to maintain the emotional toughness associated with their masculine identity. This is evident even among populations with elevated mental health risks – such as military veterans – where healthcare utilization remains disproportionately low, reflecting the influence of hyper-masculine cultural norms.[34]

Masculinity norms can be endorsed and adopted by females, even though these norms are directed at men. Individuals who support these restrictive masculine ideals for others may also – whether knowingly or subconsciously – hold themselves to the same standards.[35] In fact, research suggests that masculinity norms, such as strength and assertiveness, are more strongly associated with the psychological well-being of women than femininity norms.[36] A study of adults in the United Kingdom shows that restrictive masculinity norms predicted worse health behaviors for women – which were consistent with findings in men. Overall, this suggests that gender role orientation may be more important than biological sex when considering health behaviors such as getting an annual checkup.[23] Like males, females who conform to restrictive masculinity norms may avoid seeking healthcare, prioritizing mental toughness over self-care.[22] For these women, strength and emotional expression are seen as incompatible, creating a conflict that leads them to avoid mental health services and view seeking help as a source of shame. Females who adopt restrictive masculine norms may compare themselves to men to appear "tough," especially in male-dominated fields like law enforcement or the military. To meet these standards, they often suppress physical and mental health needs.[37] Female veterans who embrace these norms are less likely to seek care, despite high rates of PTSD, anxiety, depression, and other health issues. This pressure to prove capability can lower self-efficacy and harm their overall health.[38,39]

A study with a university sample and a separate adult sample found that females personally endorsing masculine norms such as self-reliance had more barriers to help-seeking, less use of preventative healthcare, and delay of care. This finding indicates that when women internalize masculine ideology – particularly valuing self-reliance and bravery as core aspects of their self-worth – they experience similar negative outcomes as men.[24]

Limitations

This study comes with limitations. It is a convenience sample of young adults in Rhode Island and may not represent the young adult population nor the young adult population in Rhode Island. This study is also subject to recall and social desirability bias – thus people may be hesitant to report they did not access a checkup in the past year. Also, this study is cross-sectional in nature and therefore causality cannot be inferred. Finally, this study only measured beliefs related to restrictive masculine norms, it did not measure conformity to such norms.

Importance of Intervention

Intervention is needed to decrease barriers to healthcare and encourage accessing annual checkups for both males and females. There is a need for gender-sensitive healthcare messaging that is tailored specifically to the needs of those who possess restrictive masculine norms to view seeking healthcare as a strength rather than a weakness. By using an education-based approach, group learning sessions with the focus of familiarizing males on how to access healthcare services while providing reassurance that healthcare is not bound to a specific sex nor gender, may be helpful as a preliminary step.[40] A foundation rooted in social-emotional education can be beneficial as males that inherited restrictive masculine norms may have had inaccurate or incomplete information passed down to them and cannot rationalize the concept of healthcare as being helpful.[40,41] Health programs in male-centered settings may provide a comfortability for males to engage more informally with health screening without the pressure of a typical clinical-style setting. *The Confess Project of America* is an example of this type of initiative using barbershops as a site for accessible mental health services coming from service professionals dually

trained in administering mental health counseling.[42] The environment in which this service takes place has the ability to remove the stigmatization of seeking treatment as the individual is surrounded by those who come from similar backgrounds and even professionals who have once been in their position.[42] For females, increasing social support networks and implementing programs that allow for female input on how to access care may make seeking healthcare more desirable.[43,44] Social support can come in many forms including through social media platforms and in-person group therapy.[44] Frameworks such as Pender's Health Promotion Model can be beneficial in these settings to promote the message of positive health seeking behaviors and to teach individuals how to take control of maintaining their well-being while reframing how they look at the external factors making them avoid healthcare.[44] For both males and females of military status, programs such as the Defender's Edge program help reduce stigma from seeking healthcare services.[45] Increasing support among this community for healthcare utilization is extremely important as some of the highest need for mental health care is among this population.[38,45] The approach that the Defender's Edge program takes is promoting this effort with a strength-based philosophy, making it more appealing to those who find difficulty in diverting from restrictive masculine norms.[45]

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