Empowerment and Problems in Health Care Access among Currently Married Women in Myanmar: A Secondary Data Analysis on MDHS 2015-16

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Research

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Empowerment and Problems in Health Care Access among Currently Married Women in Myanmar: A Secondary Data Analysis on MDHS 2015-16

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ABSTRACT

Background: Women's health outcomes are influenced by the lack of access to health care and their inability to make decisions for themselves. This study was conducted to identify the association between women's empowerment and the problems in assessing health care among currently married women aged 15-49 years.

Method: A secondary analysis by using Myanmar Demographic and Health Survey (MDHS) (2015-16) data, which included all 15 regions of Myanmar. In the study, (7,759) eligible currently married women aged 15-49 years were included.

Result: Among eligible women, 52.43% (95% CI: 0.51-0.53) had problems in accessing health care. Women with medium and high empowerment scores were less likely to experience problems in accessing health care compared to women who got low score (aOR=0.85, 95%CI: 0.73-0.98) (aOR=0.55, 95% CI: 0.47-0.65) respectively. Women from rural area (aOR=1.41, 95% CI:1.15-1.72) and women living in Chin State, one of the least developed states,

(aOR=1.84, 95% CI: 1.38-2.46) had faced more problems in accessing health care, on the other hand, the problems were seen to be reduced in the case of women aged over 35 years (aOR=0.66, 95% CI: 0.47- 0.94), and those who had an educated husband (aOR=0.76, 95% CI: 0.66-0.86), a husband with a white collar job (aOR=0.71, 95% CI: 0.56-0.89), and those living with an extended family (aOR=0.74, 95% CI: 0.66-0.84).

Conclusion: The study showed when the women are more empowered, they might have less problems in accessing health care. These finding would contribute to the policy formulation in reducing health inequity issues in terms of increasing women's empowerment by enabling women getting equal right to education and jobs.

Key words: women's empowerment, problems in accessing health care, Demographic and Health Surveys, Myanmar, knowledge, decision power, beating, labour force

1. Introduction

In recent years, women's empowerment has become an important issue globally. It can be defined as women having the ability to make their own decisions and also being able to act accordingly (1). Women's empowerment is context-specific, and it is determined by various aspects. Women's empowerment is influenced by the women's level of education, employment for cash status, extent of media exposure, and spousal age difference (2). There is substantial evidence that the life of women living in low-income countries is characterized by exclusion, and this is reflected in their poor access to basic health care and services (3). Women's empowerment has a profound influence on the use of health services that could be linked to reproductive health outcomes (4,5).

A group of study, mainly conducted in Asia and Africa, showed that women's empowerment is linked with contraception usage (6,7), lower fertility(8) and longer birth intervals(9). In Ghana, aspects of household decision-making, perceptions of spousal abuse,

and spousal age differences were associated with women's utilization of health care. If the age difference of the couple is narrower, the women are more likely to be involved in the household decision-making (2).

Though out-of-pocket financing has decreased from 81% to 65% of Myanmar's total health expenditure between 2014 and 2015 after increases in public spending, out of pocket financing still remains the primary method of payment for health services in the country. Though the government of Myanmar aims to extend accessing to a Basic Essential Package of Health Services (EPHS) to the entire population by 2020, as of the data collection, health facilities charged patients fees for maternal and child health services (10,11). A study was done in 2018 stated that attainment of universal health coverage in Myanmar in the immediate future will be very challenging, as a result of the low health service coverage, high financial risk, and inequalities in access to healthcare. Health care utilization indicators are low such as family planning needs satisfied: 75.9%, at least four antenatal care visits: 55.5%, full immunization: 55.2%, institutional delivery: 37.1% and skill birth attendance: 60.2% (12).

In the recent Myanmar census report (2014), maternal mortality ratio was 282 per 100,000 live births, making it the second highest among South East Asian countries (13). The majority, 62%, of maternal deaths occurred at home and 14% died on their way to hospital due to late referrals, primary delays, and long distances to travel (14). A qualitative study was conducted internally displaced person who stayed in the camps in Kachin State by the Gender Equality Network in 2013. The findings of the study provided insights on health problems experienced by women. Furthermore, lack of access to health care by the women and inability to make their own decisions on contraceptive usage led to increased reproductive health problems and highlighted gender inequality issues in Kachin State, Myanmar (15).

There is limited understanding in Myanmar regarding the relation between empowerment of women and health service utilization including reproductive, maternal, and

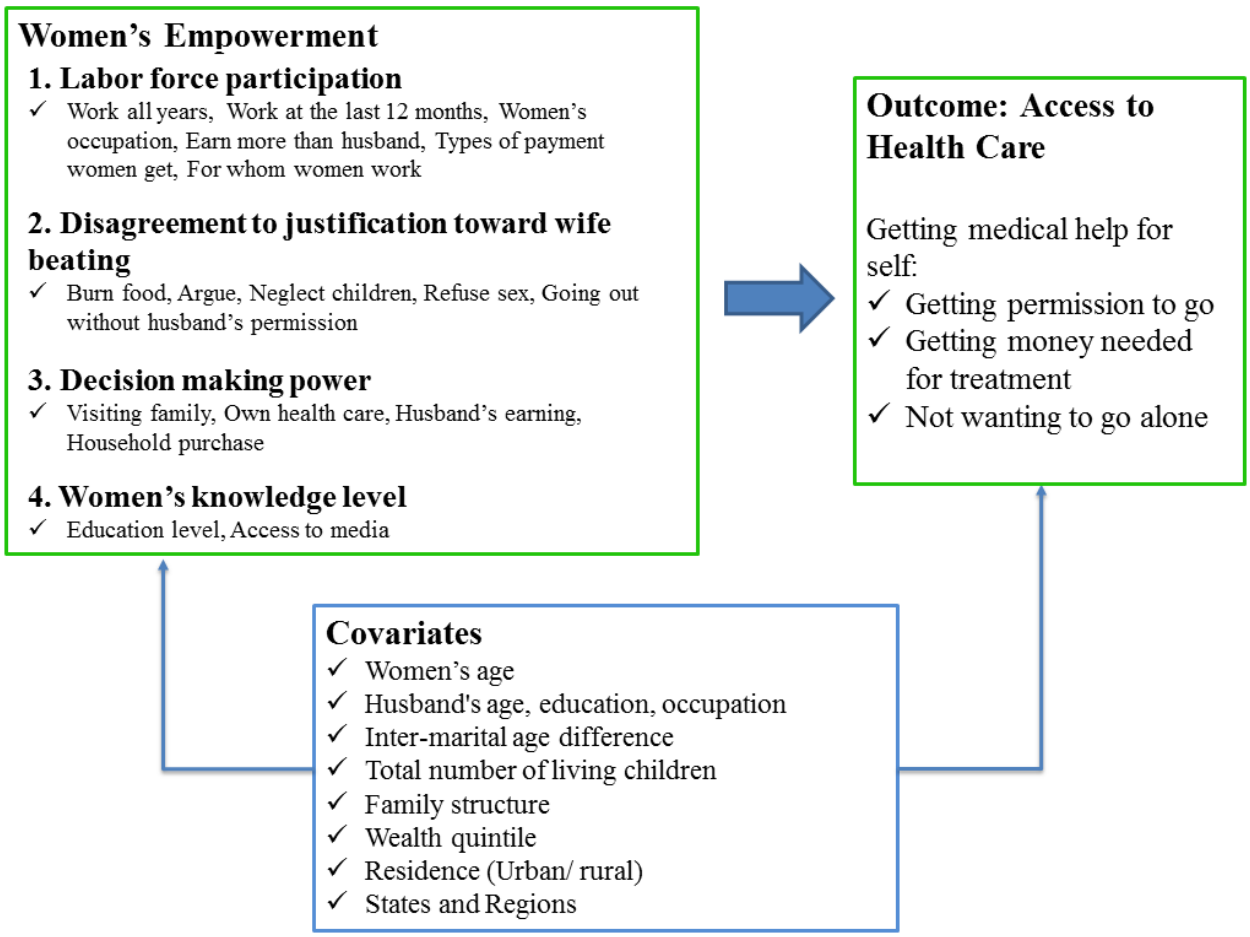
child health by married women. The study aimed to explore the level of women's empowerment, to provide insight into the link between women's empowerment and problems in accessing health care services for women and potentially to inform policy around both, using a comprehensive and conceptually-driven index of women's empowerment among currently married women by using Myanmar Demographic and Health Survey (MDHS) (2015-16) data.

2. Materials and Methods

This study used the data from the first MDHS conducted between 2015 and 2016. The DHS was a nationally representative cross-sectional survey on demographic and health indicators of women and members of their households, which was implemented by the Ministry of Health and Sports, Myanmar with technical assistance from ICF (Rockville, Maryland, USA). Detailed methods and data collection procedures had been published elsewhere (16). Briefly, a two-stage cluster sampling design (441 clusters, 30 households per cluster) was used and stratified by urban and rural status in 15 states and regions. Administratively, Myanmar consists of seven states representing the mountainous areas and eight regions representing the plain area and most of the regions are relatively more developed (13). Rural and urban areas are defined according to Ministry of Home Affairs, Myanmar. According to definition, the urban area should meet more than 20 criteria such as large population, availability of basic public services: transportation, electricity, safe drinking water, etc (17).

A standardized questionnaire was used to collect the data on demographic, social, and behavioural indicators, including health status and reproductive health of all men and women aged between 15 and 49 years in selected households. The focus of the analysis was on 7,759 eligible currently married women aged 15-49 years. The sample was restricted to married women because some indicators to calculate women's empowerment were only available for currently married women: namely decision-making power and some labour force participation

items (relative to husband) were not available for unmarried women. A conceptual framework was constructed to meet the aim of the study (Figure 1).



Figrue 1. Conceptual framework

2.1 Outcome variable

Problems in accessing health care were the outcome variables of interest. In the MDHS 2015-16, all women were asked, "When you are sick and want to get medical advice or treatment, is each of the following a big problem or not? (1) Getting permission to go to the doctor? (2) Getting money needed for advice or treatment? (3) The distance to the health facility? (4) Not wanting to go alone?" The outcome variable was categorized by recoding "yes" responses to the items "getting permission to go to the doctor", "getting money for advice or treatment," and "not wanting to go alone" in the study. A study which conducted as multi-

country analysis of DHS data, presented distance to the health facility did not affect the women's ability to make the decision for herself (18), therefore, distance to the health facility was not included in the consideration of problems in accessing health care in the study. Those who had encountered all or some problems in three domains were categorized as having problems in health care access and those who did not encounter any problem in all three domains were categorized as having no problems (Figure 2).

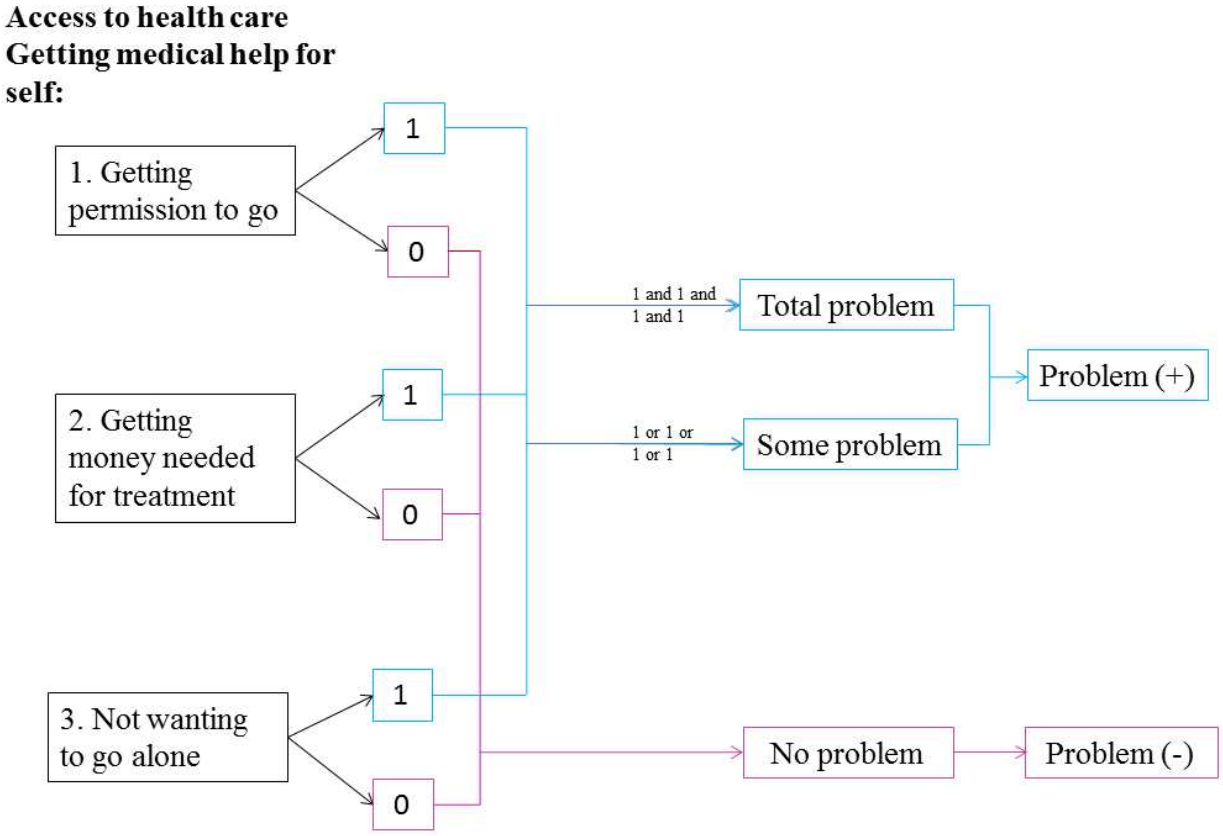


Figure 2. Scoring system for access to health care

2.2 Exposure variables

The composite variable of women's empowerment index was constructed from 17 indicators selected based on the previous literature [4,18] and categorized them into four domains namely, women's labour force participation, decision-making power, women's disagreement with the justification of wife beating, and women's knowledge. Women's labour force participation was measured by six items: work in the last 12 months, for whom the women

work, women's occupation, types of payment, work throughout the year and earns more than her husband. Decision-making power was assessed through four items: who made decisions about women's own health care, household purchases, visits to family members, and husband's earnings. Women's disagreement with the justification of wife beating was evaluated in five items: neglecting children; going out without husband's permission; arguing with husband; refusing sex; and burning food. The women's knowledge component included formal education level (no education, primary, secondary, and higher) and access to media (television and radio in the household). To obtain the score of each domain, the summative index of the domain was calculated. The index for each domain was divided by the number of items that means for decisions and wife beating indicator, we divided with five because there were five items in each domain. For labour force, we divided by six, because it had six items. Regarding women's knowledge domain, we divided by seven. After which, each domain was equally weighted and combined into the single, composite index of women's empowerment.

For bivariate and multiple logistic regression analysis, the total score of the composite index was then divided into terciles of low, medium, and high levels to avoid categorical bias, see (Figure 3).

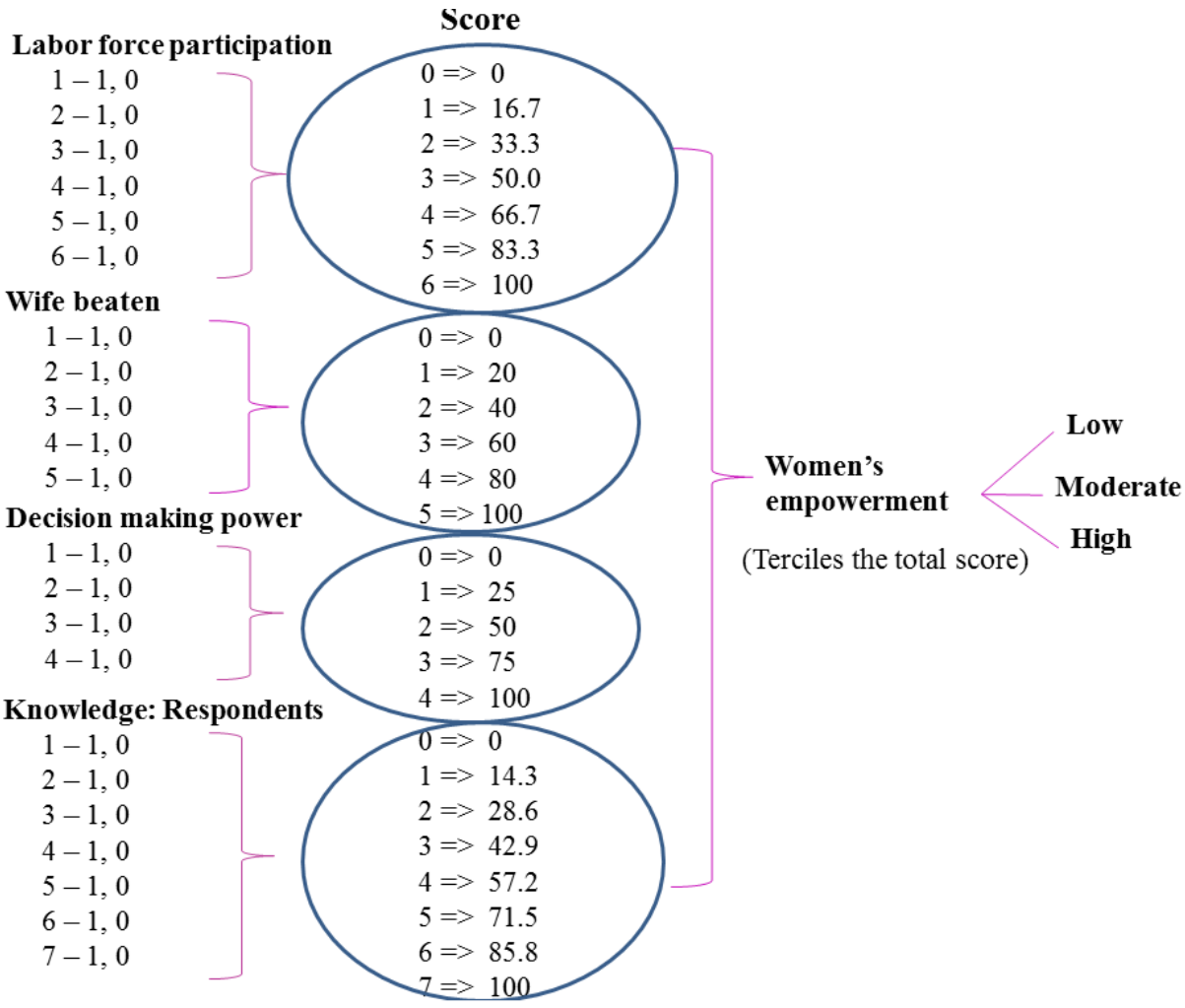


Figure 3. Scoring system for domains of women's empowerment

Other relevant socio-demographic factors, included in the MDHS data, were considered as independent factors in the analysis. The occupation variable was recoded to white collar workers (professional/ technical/ managerial/ clerical) and blue-collar workers (agricultural/manual). Before doing the multivariable logistic regression analyses with confounders' adjustment for survey sampling design, univariate and bivariate analysis were done. DHS sample weights were used in all analyses to make sample data representative of the entire population [19]. Only variables with significant association in the bivariate analyses were included in the multivariable logistic regression model. Reference categories were set according to MDHS (2015-16) report [13] and coding system [20]. Odds ratio and 95%

confidence interval (CI) were calculated for the final model. All analysis was used svyset command in STATA 14.

3. Results

3.1 Background characteristics

Table 1 shows the background characteristics of currently married women aged 15-49 years. Among them, 47.14% of currently married women had a primary education level, and 73.94% were living in rural areas. Regarding respondents' occupation, 29.26% of women were not working and only 5.57% of women were working as white collar workers. In terms of familial and marital composition, half of the women were in a nuclear family type while 49.19% were in an extended family type. Among married couples, the majority of the wives were younger than their husbands. Education level of respondent's husband showed that 36.25% had no education and incomplete primary education, and 54.44% had complete primary and some secondary education. Regarding the occupation of respondent's husband, majority of them were blue collar workers.

3.2 Problems in health care access

In Table 1, the distribution of problems in accessing health care among currently married women across background characteristics is shown. Among currently married women, 52.43% (95%CI: 0.51-0.53) had problems in accessing health care. A total of 36.02% of the women with high empowerment experienced a few problems while 56.57% of women with low empowerment index scores experienced more problems in accessing health care. Experience of problems in accessing health care varied by respondent's age, educational level, and wealth quintiles. Women living in rural regions, 51.34% experienced problems while 36.87% of those living in urban areas encountered problems in accessing health care. Women whose husbands had lower educational and occupational status faced more problems.

Regarding family structure, 52.25% of women from nuclear families had problems while 42.77% of those from extended families faced problems in accessing health care.

Table 1. Distribution of background characteristics and status of problems in health care access among currently married women age 15-49 year (N=7,759)

Background characteristics	n (%)	Problems in health care access	No problem in health care access
		4,068(52.43)	3,691(47.57)
Women's empowerment			
Low	2650 (34.15)	1,499 (56.57)	1,151 (43.43)
Medium	2,555 (32.93)	1,272 (49.78)	1,283 (50.22)
High	2,554 (32.92)	920 (36.02)	1,634 (63.98)
Age			
15-19	228 (2.93)	119 (52.54)	109 (47.46)
20-24	834 (10.74)	418 (50.11)	416 (49.89)
25-29	1,258 (16.22)	610 (48.44)	648 (51.56)
30-34	1,505 (19.40)	721 (47.90)	784 (52.10)
35-39	1,482 (19.10)	687 (46.32)	795 (53.68)
40-44	1,283 (16.53)	601 (46.87)	682 (53.13)
45-49	1,169 (15.07)	535 (45.77)	634 (54.23)
Education			
No education	1,197 (15.38)	738 (61.86)	459 (38.14)
Primary	3,656 (47.14)	1,908 (52.19)	1,748 (47.81)
Secondary	2,285 (29.46)	912 (39.89)	1,373 (60.11)
Higher	621 (8.01)	131 (21.13)	490 (78.87)
Occupation			
Not working	2,270 (29.26)	1,060 (46.71)	1,210 (53.29)
White collar	432 (5.57)	133 (30.78)	299 (69.21)
Blue collar	5,057 (65.17)	2,485 (49.34)	2,572 (50.66)
Residence			
Urban	2,022 (26.06)	746 (36.87)	1,276 (63.13)
Rural	5,737 (73.94)	2,945 (51.34)	2,792 (48.66)
Region			
Kachin	238 (3.07)	144 (60.63)	94 (39.37)
Kayah	40 (0.52)	22 (55.80)	18 (44.20)
Kayin	201 (2.59)	117 (58.45)	84 (41.55)
Chin	66 (0.85)	48 (73.14)	18 (26.86)
Sagaing	828 (10.67)	254 (30.64)	574 (69.36)
Taninthayi	174 (2.24)	80 (46.01)	94 (53.99)
Bago	780 (10.05)	287 (36.80)	493 (63.20)
Magway	642 (8.27)	325 (50.56)	317 (49.44)
Mandalay	837 (10.79)	327 (39.05)	511 (60.95)
Mon	278 (3.58)	95 (34.22)	183 (65.78)

Rakhine	454 (5.85)	245 (53.84)	209 (46.16)
Yangon	1,042 (13.43)	476 (45.69)	566 (54.31)
Shan	901 (11.61)	489 (54.24)	412 (45.76)
Ayeyarwaddy	1,083 (13.96)	676 (62.42)	407 (37.58)
Naypyidaw	194 (2.50)	106 (54.43)	89 (45.57)
Husband's occupation			
White collar	661 (8.52)	198 (30.00)	463 (70.00)
Blue collar	7,098 (91.48)	3,433 (49.06)	3,665 (50.94)
Husband's education			
Incomplete primary and none	2,813 (36.25)	1,535 (56.65)	1,278 (43.35)
Complete primary and some secondary	4,224 (54.44)	1,938 (45.89)	2,286 (54.11)
Complete secondary and higher	722 (9.31)	171 (23.63)	551 (76.37)
Wealth quintile			
Poorest	1,622 (20.90)	1,131 (69.72)	491 (30.28)
Poorer	1,586 (20.44)	903 (56.94)	683 (43.06)
Middle	1,555 (20.04)	710 (45.64)	845 (54.36)
Richer	1,509 (19.45)	569 (37.70)	940 (62.30)
Richest	1,487 (19.16)	378 (25.44)	1,109 (74.56)
Polygamy			
No other wives	7,321 (94.35)	3,436 (46.94)	3,885 (53.06)
Have other wives	420 (5.41)	242 (57.72)	178 (42.28)
Don't know	18 (0.23)	13 (73.38)	5 (26.62)
No. of living children			
No child	917 (11.82)	399 (43.49)	518 (56.51)
1 - 3	5,437 (70.07)	2,512 (46.20)	2,925 (53.80)
4 and more	1,405 (18.11)	781 (55.54)	624 (44.46)
Inter marital age difference			
Same age	818 (10.54)	375 (45.89)	443 (54.11)
Husband>wife	5,276 (68.00)	2,554 (48.44)	2,722 (51.56)
Wife>husband	1,665 (21.46)	759 (45.60)	906 (54.40)
Family structure			
Nuclear	3,942 (50.81)	2,060 (52.25)	1,882 (47.75)
Extended	3,817 (49.19)	1,626 (42.77)	2,191 (57.23)

3.3 Associations between women's empowerment and problems in health care access

Table 2 presents the regressions result examining the relationship between women's empowerment and problems in accessing health care among currently married women. Women who had either medium or high levels of empowerment had smaller odds regarding problems in accessing health care after controlling for other factors, 15% (aOR=0.85, 95% CI: 0.73-0.98) and 45% (aOR=0.55, 95% CI: 0.47- 0.65) lower respectively. Women over 35 years of

age faced fewer problems in accessing health care compared to younger women. Women aged 40-44 years had around a 34% reduction (aOR=0.66, 95% CI: 0.47-0.94) in encountering problems in health care access in contrast to women aged 15-19 years. Regarding residence, women who lived in rural areas have 1.41 times (aOR=1.41, 95% CI: 1.15-1.72) higher odds of encountering problems in accessing health care than those who lived in urban areas. Turning to regions, most of the developed regions and states showed a 27%-77% reduction in the odds of having problems in accessing health care compared to those in Kachin State, holding all other factors constant. Chin State had 1.84 higher odds (aOR=1.84, 95% CI 1.38-2.46) to encounter problems in accessing health care.

The husband's education was also a significant factor in the likelihood of women having problems in health care access. Compared with women whose husbands had no or incomplete primary education, there were lower odds of experiencing problems in health care access among those whose husbands either had complete primary (aOR=0.76, 95% CI 0.66-0.86) or complete secondary (aOR=0.41, 95% CI 0.31-0.54) education. Women whose husbands hold white collar jobs experienced a 29% reduction in the odds of having problems in accessing health care (aOR=0.71, 95% CI 0.56-0.89). From the family structure point of view, the women who lived in an extended family had a 26% reduction in experiencing problems in health care access compared with those who lived in a nuclear family (aOR=0.74, 95% CI 0.66-0.84).

Table 2. Association between women's empowerment and problems in health care access among currently married women age 15-49 year adjusting for covariates

Variables	Problems in health care access				
	Number	%	cOR	aOR	95% CI
Women's empowerment					
Low	2650	34.15	1	1	
Medium	2,555	32.93	0.76***	0.85*	0.73, 0.98
High	2,554	32.92	0.43***	0.55***	0.47, 0.65
Age					

15-19	228	2.93	1	1	
20-24	834	10.74	0.91	0.83	0.58, 1.19
25-29	1,258	16.22	0.85	0.76	0.54, 1.06
30-34	1,505	19.40	0.83	0.72	0.50, 1.04
35-39	1,482	19.10	0.78	0.70*	0.49, 0.99
40-44	1,283	16.53	0.8	0.66*	0.47, 0.94
45-49	1,169	15.07	0.76	0.67*	0.47, 0.96
Residence					
Urban	2,022	26.06	1	1	
Rural	5,737	73.94	1.81***	1.41**	1.15, 1.72
Region					
Kachin	238	3.07	1	1	
Kayah	40	0.52	0.82	0.81	0.57, 1.16
Kayin	201	2.59	0.91	0.81	0.58, 1.13
Chin	66	0.85	1.77***	1.84***	1.38, 2.46
Sagaing	828	10.67	0.29***	0.23***	0.17, 0.32
Taninthayi	174	2.24	0.55**	0.52***	0.37, 0.72
Bago	780	10.05	0.38***	0.35***	0.26, 0.47
Magway	642	8.27	0.66*	0.62**	0.44, 0.88
Mandalay	837	10.79	0.42***	0.40***	0.29, 0.54
Mon	278	3.58	0.34***	0.31***	0.20, 0.47
Rakhine	454	5.85	0.76	0.60**	0.44, 0.81
Yangon	1,042	13.43	0.55***	0.67**	0.49, 0.90
Shan	901	11.61	0.78	0.71	0.48, 1.04
Ayeyarwaddy	1,083	13.96	1.1	0.95	0.65, 1.39
Naypyidaw	194	2.50	0.78	0.73*	0.54, 0.98
Husband's occupation					
Blue collar	661	8.52	1	1	
White collar	7,098	91.48	0.44***	0.71**	0.56, 0.89
Husband's education					
Incomplete primary and none	2,813	36.25	1	1	
Complete primary and some secondary	4,224	54.44	0.65***	0.76***	0.66, 0.86
Complete secondary and higher	722	9.31	0.24***	0.41***	0.31, 0.54
Wealth quintile				NA	NA
Poorest	1,622	20.90	1		
Poorer	1,586	20.44	0.57***		
Middle	1,555	20.04	0.36***		
Richer	1,509	19.45	0.26***		
Richest	1,487	19.16	0.15***		
Polygamy				NA	NA
No other wives	7,321	94.35	1		
Have other wives	420	5.41	1.54**		
Don't know	18	0.23	3.12		
No. of living children				NA	NA
No child	917	11.82	1		

1 - 3	5,437	70.07	1.12		
4 and more	1,405	18.11	1.62***		
Inter marital age difference				NA	NA
Same age	818	10.54	1		
Husband>wife	5,276	68.00	1.11		
Wife>husband	1,665	21.46	0.99		
Family structure					
Nuclear	3,942	50.81	1	1	
Extended	3,817	49.19	0.68***	0.74***	0.66-0.84

*** p<0.0001, ** p<0.001, *p<0.05

cOR- Crude Odds ratio, aOR- Adjusted Odds ratio,95%CI – 95% Confidence Interval

4. Discussion

This study was conducted to identify the association between empowerment among currently married women and the problems in accessing health care using MDHS (2015-16) data. More than half of the currently married women had problems in accessing health care. Many studies already stated the condition especially in developing countries [21–24]. Getting permission to get healthcare, getting money for treatment and not wanting to go alone influence negatively on accessing health care in different settings [23,25–27].

After adjusting for some variables, it was found that women with medium and high empowerment, experienced fewer problems, 15% and 45% reduction respectively, in accessing health care compared to women with low empowerment. Women's empowerment had great impact on accessing health care and it was confirmed by previous studies (5,24,28,29).

However, women's empowerment was not the only significant association with problems in accessing health care. Older women could access health care services more easily compared to younger ones. This might be due to reducing in some problems such as not wanting to go alone and getting permission to go to doctor while accessing health care. The lower the respondent's age, the more problems in accessing health care they faced. This finding was also stated in the study done in Bangladesh (6). In the study, access to health care of married women was better if they were married to educated and had white collar husbands.

These findings were consistent in a study done in Myanmar, women whose husbands had an education at the secondary or higher levels and had decent works, had more participated in decision makings including decision on own health care [31]. Therefore, education and employment status of the husband had influence on the wife's access to health care [5,27].

More women from the Chin State, experienced problems in accessing health care compared to those who lived in Kachin State. Other regions such as Saging Region, Bago Region, and Mon State; they showed less experience of problems in access to health care. Chin State is one of the least developed regions in Myanmar. Its reproductive health indicators such as modern contraceptives usage was the lowest and unmet need for family planning was the highest among the regions [13]. At the same time, women from rural area still faced more problems compared to those from urban areas. It might be that geographical and transportation difficulties were one of the main causes of problems in accessing health care in different states and regions. Together with geographical and transportation difficulties, other factors, including women's empowerment, might influence the health seeking behaviour of women [21,24]. The women who lived in extended families had less problems in access in health care in contrast to those lived in a nuclear family. It might be they had more accompanies to go to the clinic and they had other family members to take care of their children. Many studies had shown similar result [32-34].

Since this study was secondary data analysis, study variables were limited in exploring women's empowerment and problems in accessing health care, other influencing factors such as relationship within the household members, perception on health care accessing, readiness of the health care providers which did not included in MDHS 2015-16. Women's empowerment is a complex concept and we could not include other factors; cultural contents and social contents. When we developed composite women's empowerment indicator, there might be some categorical bias. Moreover, the findings of this study could not reflect all women in

Myanmar since only currently married women were included. Further qualitative studies should be considered to get more insights to link the women's empowerment and not only health but also other development sectors.

5. Conclusion

The study was carried out to investigate the association between women's empowerment and problems in accessing health care. Women's empowerment is an important determinant of the ability to access health care especially in rural areas. Women from less developed regions had more problems in accessing health care. Problems in access to health care are reduced when the women's age is over 35 years, has an educated husband, has a husband with a white collar job, and lives in an extended family. Therefore, we believe that the findings would contribute to the policy formulation in reducing health inequity issues in terms of increasing women's empowerment by enabling women getting equal right to education and jobs.

ABBREVIATIONS

DHS	Demographic and Health Surveys
MDHS	Myanmar Demographic and Health Survey
USAID	United States Agency for International Development

DECLARATIONS

Ethical approval and consent to participate

The datasets of the MDHS (2015-16) were accessed with the permission of ICF International. The primary demographic and health surveys data were collected in accordance with international and national ethical guidelines. The protocol for the 2015–2016 MDHS was reviewed and approved by the Ethics Review Committee of Department of Medical Research, Ministry of Health and Sports. For this secondary analysis, we got permission from Department of Public Health, Ministry of Health and Sports.

Consent for publication

Not applicable

Availability of data and materials

The datasets analyzed during the current study are available in the https://dhsprogram.com/data/dataset/Myanmar_Standard-DHS_2016.cfm?flag=0

Conflicts of Interest

The authors declare no conflict of interest.

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Author Contributions

All authors contributed to protocol development. Wk completed the abstract, methods, and statistical analysis and provided close supervision on each component, such as the conceptualization, methods, statistical analysis and presentation of data, and preparation of the manuscript. Nmmh completed the statistical analysis, background, and discussion. Zlh contributed to statistical analysis, results, and conclusions. All authors read and approved the final manuscript**.**

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Figures

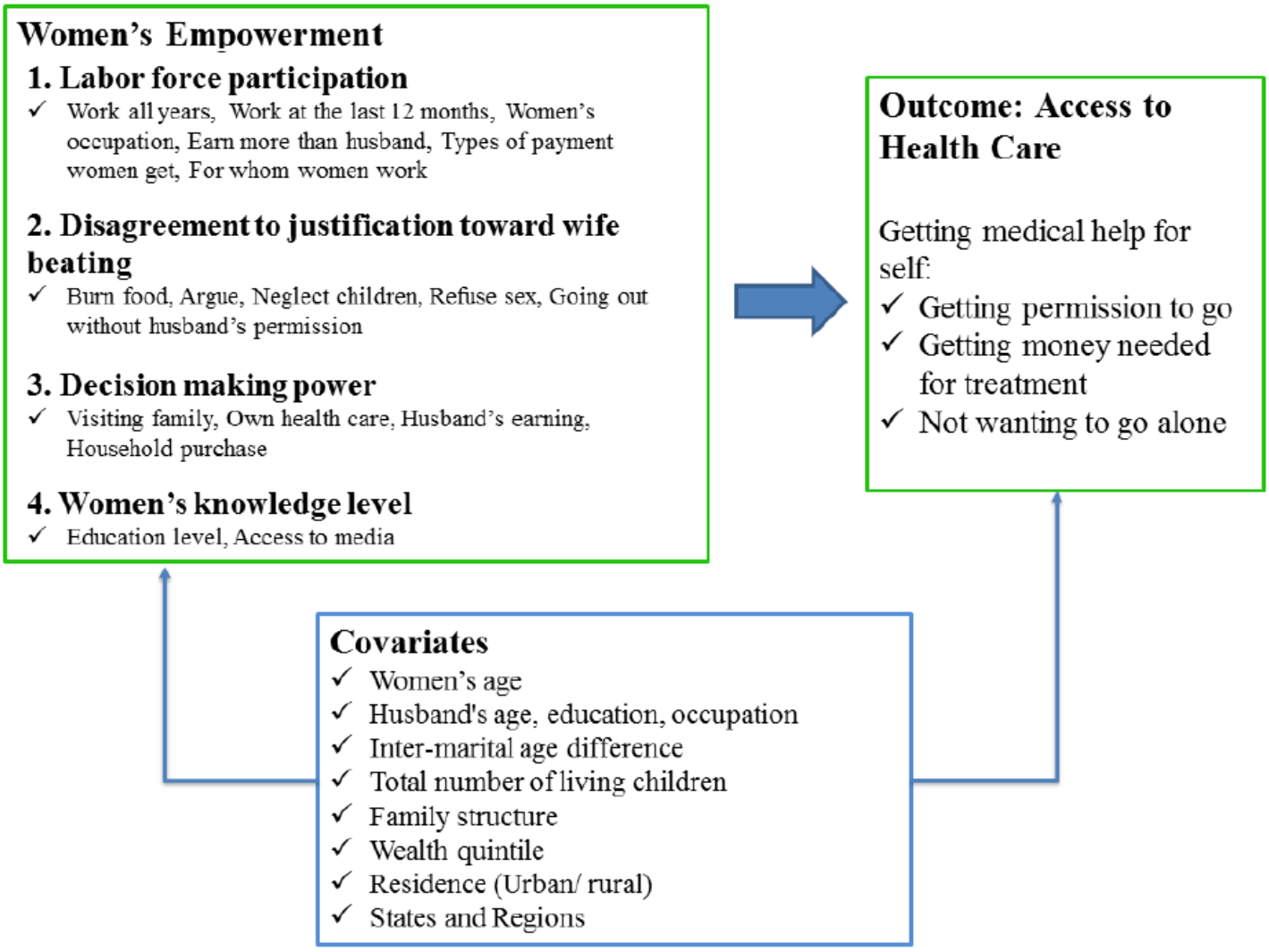

Figure 2

Conceptual framework

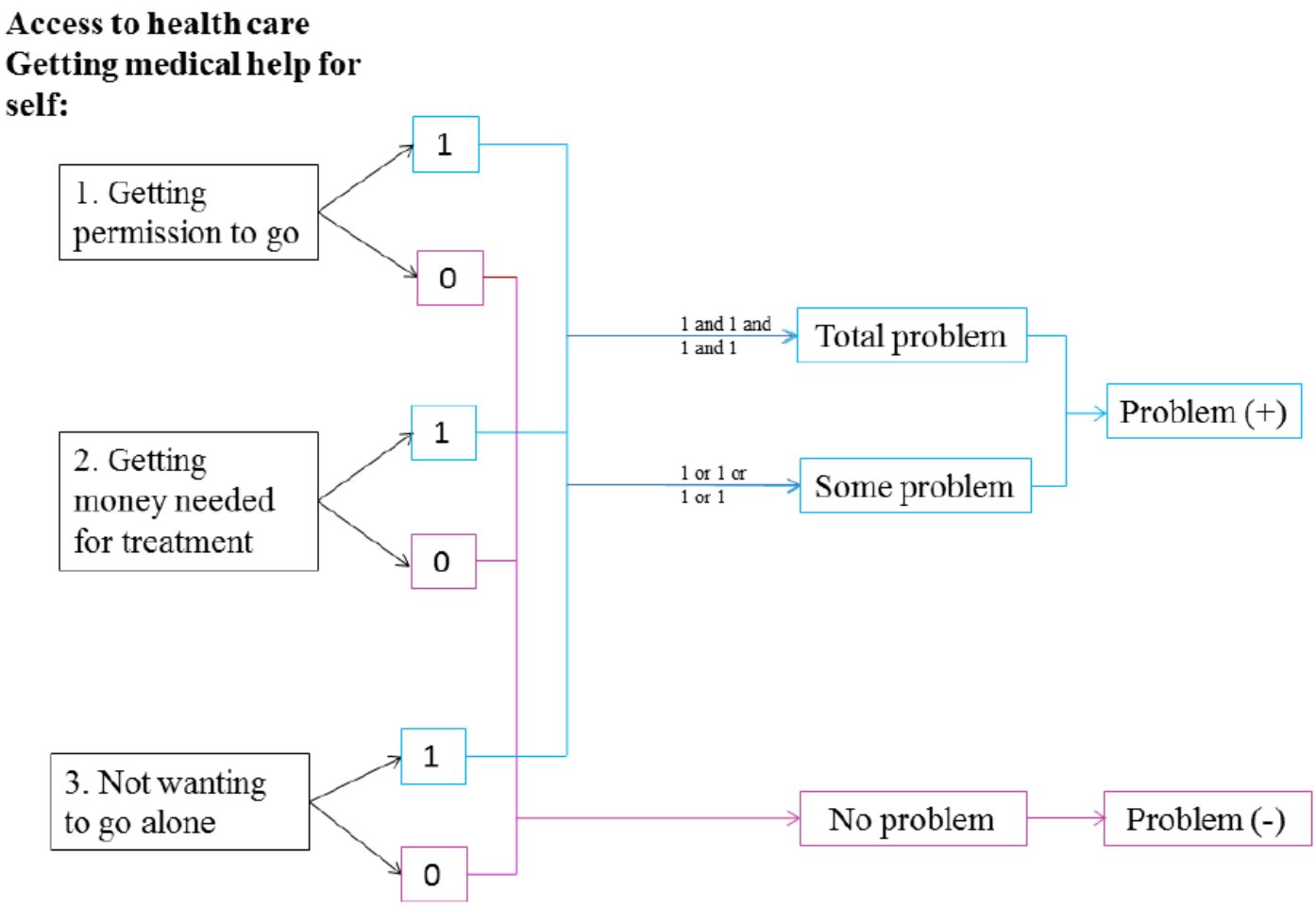

Figure 4

Scoring system for access to health care

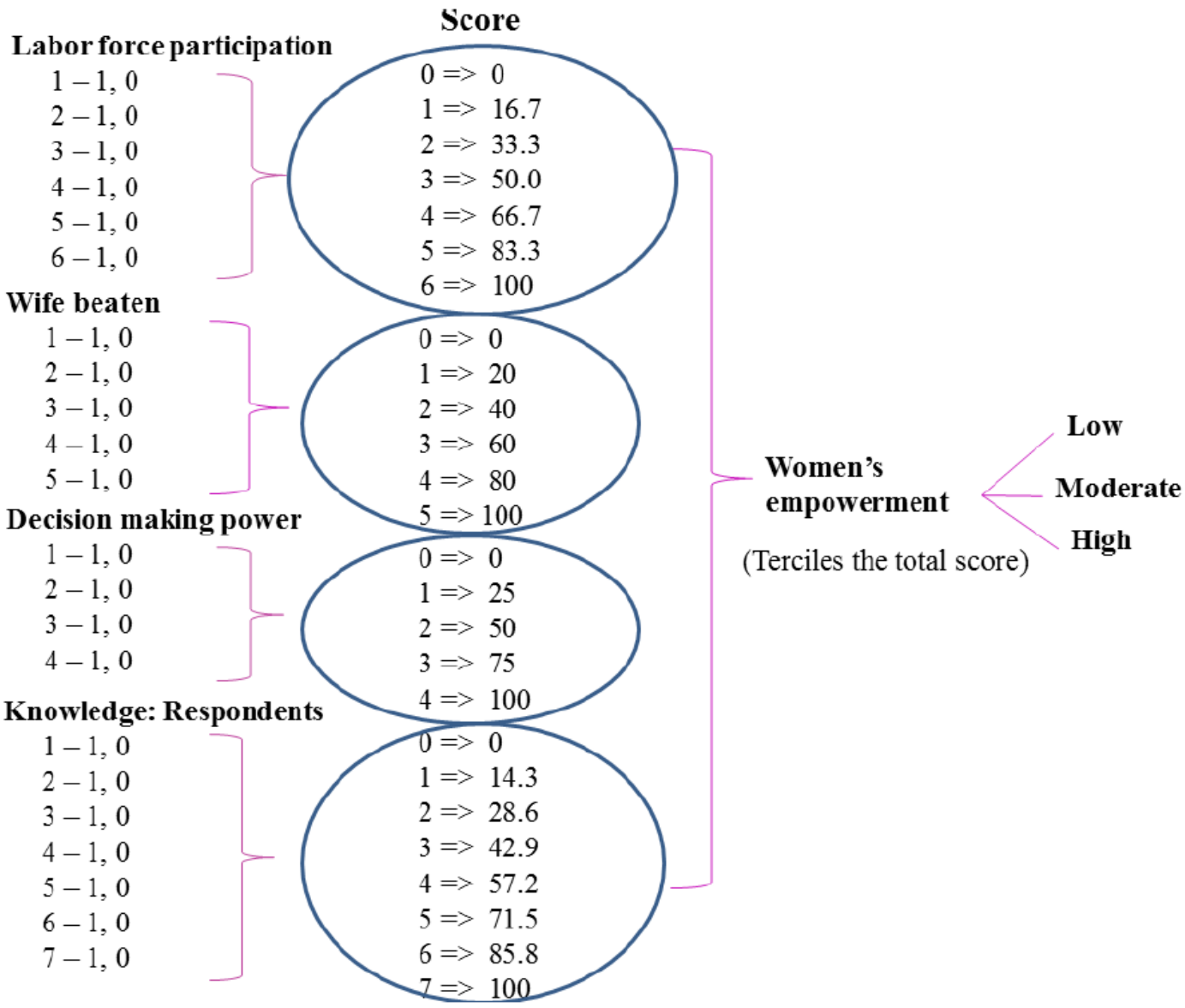

Figure 6

Scoring system for domains of women's empowerment