Determinants of women's Empowerment in El-Beheira Governorate

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Abstract

*   **Background**: Women empowerment has gained a higher priority in today's global development plan and is strongly linked with multiple development outcomes. Women empowerment is a multifaceted phrase .This phrase has many dimensions: demographic, social, psychological, cultural and economic. **Aim of study:** to assess the determinants of women's empowerment in EL-Beheira Governorate. **Design:** A cross sectional descriptive design was used. **Setting:** The study was conducted on 4 out of 16 directorates in El-Beheira governorate, namely; Shobrakhet, Damanhour, Elrahmania and HoshEisa **Subject**: a convenient sample of 807 women were selected from Maternal and Child Health centers (MCH) as clients, doctors, nurses, administrative work and workers in the previously mentioned settings. **Tool for data collection**: A structured interview questionnaire, which included two parts; part I was used to assess socio-demographic characteristic of the studied women. Part П was used to assess women empowerment indicators. **Results**: Total empowerment indicators were (fair empowerment). The highest mean percent of empowerment indicators was related to psychological indicators followed by political indicators and social indicators. While, the lowest mean percent score was related to health indicators and economic indicators. **Conclusion**: the study revealed that women's age at marriage and women who have children (1-2 children) are the most independent risk factors associated with women empowerment (OR=3.326, P=0.001, OR=2.305, P=0.041) respectively and women's age and education are the most independent protective factors associated with women empowerment (OR=0.414, P=<0.001, OR=0.357, P=<0.001) respectively. **Recommendations**: Improve women's access to reproductive health care services, in particular, by removing financial barriers through mutual health insurance schemes and promoting gender balance in access to education across the country, by insisting on the enrolment of a higher percentage of girls in schools from the primary level.*

Keywords: women empowerment, determinants, economic, psychological, social

Introduction:

Women are essential and significant part of any society; however, they face several obstacles in obtaining their rights. Therefore, women must be empowered with and have rights of education, health, security, occupations, skills, decision-making power, improved living standards and respect. Women's empowerment is known as a change in a woman's life circumstances, enabling her to increase her ability to manage more strengthened and rewarding lives. Improving women's empowerment is a prominent issue for achieving the Sustainable Development Goals. (Elgzar et al., 2021).

In 2020, according to United States agency for international development

(USAID, 2019) Egypt ranked 134th out of the 153 countries in the Global Gender Gap Index. It ranked 140th out of 153 countries in women's economic participation and opportunity. Only 18% of the working-age women are participating in the economy, compared to 65% of men. This suggests the dire need for a comprehensive and ambitious strategy that is owned and activated by all social strata and institutions. (National Strategy for the Empowerment of Egyptian Women 2030). The National Council for Women (NCW, 2017) initiated a wide community dialogue to develop the national strategy for the empowerment of Egyptian women; the strategy fully complies with the spirit and direction of Egypt's Vision 2030 and its Sustainable Development Strategy (SDS). The strategy is comprised of four comprehensive pillars: women's political empowerment and leadership; women's economic empowerment; women's social empowerment; and women's protection.

There is a need for the people in the field of health especially nurses and other related socio-economic development sectors to be motivated and to create awareness among people for the empowerment of women and raise health issues for the betterment of women and society as a whole. The role of community health nurse was adapted to varying circumstances at local and national levels. It's examining the healthcare beliefs and decision-making in the cultural context of a particular community. (Perry & Lauren, 2014)

As nurses, they listen to and respect the concerns of community members, creating collaborative efforts designed to reconstruct healthcare services that meet the needs of the most vulnerable populations, which in many cases comprise of women. Community health nurse will support women in several areas as: consultation on health problems, referral of women to local or other specialized institutions, supportive supervision, guidance, and logistic support and supplies. (WHO, 2022).

Significance of the study:

The empowerment and development of women began to be the number one priority in the Egyptian government agenda. Despite the great progress in many aspects of women's empowerment, there are limited studies that tackle determinants of different dimensions of women empowerment other than the economic dimension. Therefore, the intent of the current study is to reveal the reality of the women empowerment in EL-Beheira Governorate and aim to assess the determinants of women's empowerment in EL-Beheira Governorate.

Aim of the Study:

The present study aimed to assess the determinants of women's empowerment in EL-Beheira Governorate.

Research question:

What are the determinants of women's empowerment in EL-Beheira Governorate?

Material and Methods:
Research design:

A cross sectional descriptive research design was used.

Setting:

The study was conducted in four directorates selected randomly by lottary out of 16 directorates representing 25% of the total number in El-Beheira Governorate namely; Shobrakhet, Damanhour, Elrahmania and HoshEisa, from the previous settings, one rural and one urban Maternal and Child Health centers (MCH)were selected from each directorate

Subjects:

The subjects of this study were all available women in Maternal and Child Health centers (MCH) as clients, doctors, nurses, administrative workers and workers in the previously mentioned settings.

Sampling:

- The sample size of clients in Maternal and Child health centers (MCH) was calculated by using (EPI info 7software) based on the total Population of 6623 women attended per six months to the Maternal and Child health centers (MCH), an expected frequency of 50%, acceptable margin error 5% confidence interval 95% , resulted in minimum required sample size of 400 women.
- In addition to all working female in pre mentioned centers (doctors, nurses, administrative personnel and workers), total number was 407 working women.
- So, the total sample size of study was being 807 women.

Tool for data collection:

In order to collect the necessary data from the study subjects, one tool was used named **Women empowerment indicators structured interview schedule**. It was adapted and used by the researcher from a practical guide to measure women's empowerment in impact evaluations (examples of survey questions related to women's empowerment). It included the following two parts:

Part (1) socio-demographic characteristic of women which include age, education, religion, occupation, residence, age at marriage, number of children, marital status ,type of family, husband education , occupation , age difference between women and her husband ,if women have male brother and family income.

Part (2) Women empowerment indicators: It was consisted of the following five indicators of (15) items: first economic indicators consisted of (3) items regarding account ownership and saving, control over income and/or spending decisions and women participation and involvement of job performance, second social indicators consisted of (5) items regarding gender equity awareness, gender based violence , decision making ability , better conscious

of their rights and education, third political indicators consisted of (2) items regarding participation in election and voting rights and women chance of being elected to political office as men, fourth psychological indicators consisted of (2) items regarding self-reliance, self-respect and dignity of women and self-esteem and self-confidence , finally health indicator consisted of (3) items regarding physical health status, access to and use of health resources and reproductive health.

Scoring system: each women were asked to respond to each item, women empowerment indicators questionnaire was contained two types of questions:-
First, questions that was answered with yes or no, which included Economic indicators (account ownership and saving and control over income and/or spending decisions), Social indicator (gender based violence and education), Political indicators (Participation in the election and voting rights) and Health indicators (physical health status, access to, use of health resources and reproductive health). It was scored as two (2) Points as the following:
Yes=1   No=0
Second, questions that was answered with likert scale which include Economic indicators (women participation and involvement of job performance), Social indicator (gender equity awareness, decision making ability and better conscious of their rights), Political indicators (Women chance of being elected to political office as men), Psychological indicators (self-reliance, self-respect and dignity of women and self-esteem and self-

confidence) and Health indicators (reproductive health). Five points likert scale was used as the following: - Strongly disagree =1, Disagree =2, neither agree nor disagree =3, Agree =4 and strongly agree =5. The total indicators score calculated and ranged from (30-215) and converted into percentage score as the following table:

Score	Level of woman's empowerment
≤ 50% (30-107)	Poor empowerment
50 – 75% (108-161)	Fair empowerment
≥75% (162-215)	Good empowerment

Methods:

The study was implemented according to the following steps:

I. Administrative process:

o Permission to conduct the study was obtained from the administrators of the health affair in El-Beheira Governorate.

o Permission from directors of the selected maternal and child health centers was obtained.

II- Development of study tool:

▪ Tool validity of the study was tested by Jury consists of five experts from Faculty of Nursing of Damanhour University in the field of community health nursing and obstetric and gynecologic nursing, who reviewed the contents of the tool for comprehensiveness, accuracy, clarity and relevancy. The Cronbach's alpha model which is a model of internal consistency was used to assess women empowerment indicators which consists of: economic empowerment were (0.88),social empowerment were(0.83),political empowerment (0.80) and health indicators were (0.92), Statistical equation of Cronbach's alpha reliability coefficient normally ranges between 0 and 1. Higher values (more than 0.7) denote acceptable reliability.

III- Pilot study

A pilot study was carried out on 10 % of the selected subject which consists of 80 women who were chosen randomly and excluded from the study sample in order to ensure the clarity, applicability and understanding of the tool and identify obstacles and problems which may be encountered during data collection. Accordingly the necessary modifications were taken into consideration.

IV- Collection of data:

Data collection was done over a period of 8 months (from December 2020 to July 2021, the long period due to corona virus pandemic). The data was collected individually by interviewing every women and each interview consumed approximately from 20 to 30 minutes.

Data processing and analysis:

• After data collection, the collected data was coded and transferred into especially designed format to be suitable for computer feeding.

• Data was entered into an International Business Machine - Statistical Package for Social Sciences (IBM-SPSS version 25).

• After data entry, data was checked and revised through frequency analysis, cross tabulation, and manual revision to discover any error during data entry.

• Variables were analyzed using the descriptive statistics which included: percentages, frequencies, arithmetic mean, and standard deviation (SD). It was used as measures of central tendency and dispersion respectively for normally distributed quantitative data.

- Chi-square and Fisher exact test were used to examine the differences between categorical variables.
- The Pearson correlation coefficient (Pearson's r) was used to measure the linear correlation between two sets of data. Which interpreted as the following r<0.2 (no correlation), r: 0.2-0.4 (weak correlation), r: 0.4-0.6 (A moderate correlation), r: 0.6-0.8 (A strong correlation), and r> 0.8(A perfect correlation).
- The level of significance selected for this study was $p \le 0.05$.
- Multiple logistic regression analysis to detect determinants of women empowerment.
- Graphical presentation: included Bar graphs for data visualization were done using Microsoft Excel.

Ethical considerations:
- Ethical approval was obtained from the research ethical committee in the Faculty of Nursing, Damanhour University (code 3/27.8.2020).
- Official permission was obtained to collect the data from the selected settings to facilitate data collection process.
- A written and oral consent was taken from each woman to obtain their acceptance to participate in the research.
- Confidentiality and privacy of women were maintained.
- Anonymity was guaranteed by using code numbers instead of names.

- **Results:**
- **Table (1):** shows that, age of the studied women ranged from 18 years to 65 years. More than one quarter of them (29.7%, 28.9%, 26.1%) were less than 30, 30 to less than 40 and 40 to less than 50 respectively. Regarding to education level, it can be observed that more than one third (37.7%, 36.2%) of the studied women had secondary and university education respectively. Regarding occupation, slightly less than half of the studied women (49.6%) were housewives, the majority (97.4%) of the studied women were muslims. Concerning residence, more than half of the studied women (51.1%) were living in urban areas. While the majority (78.7%) of the studied women belonged to nuclear families. Finally, in relation to presence of male brother or not, the majority of the studied women (93.3%) had brothers.

Table (2): shows that, more than three quarters (80.8%) of the studied women were married. Concerning age at marriage, more than two thirds of them (70.6%) their age at marriage ranged from 20 to less than 30years. The majority of the studied women (89%) their opinion was taken in marriage decision. In relation to age difference between women and their husbands, less than half of women (48.8%) their age difference was 5 to less than 10 years and slightly less than one quarter of them (24.5%) their age difference was 10 years and more. As regard husband education, there was more than one third (41.0%) of studied women their husband education was secondary school. Also, the majority of the studied women (95.9%) stated that their husbands were working, while only (4.1%) stated that their husbands were not working. Regarding presence of children in family, the majority of the studied women (90.8%) had children. Less than half of them (48.8%, 42.7%) had 3-4 children, or 1-2 children respectively. More than two thirds (66.5%) of them had both boys and girls. Finally, more than half (59%) of the studied women had enough income.

Table (3): displays that, the highest mean percent of empowerment indicators was related to psychological indicators 71.3 ± 11.2 followed by political indicators 65.4 ± 24.8 and social indicators 60.6 ± 8.6 . However, the lowest mean percent score observed with health indicators and economic indicators (59.5 ± 14.9, 50.3 ±

19.6) respectively. Moreover the table shows that the total percent score related to total empowerment indicators was (61.4 ± 9.2).

Table (4) This table shows that the highest frequencies of fair empowerment indicators observed with economic, social, psychological and health (45.7%, 85.1%, 60%, 53%) respectively. While the highest frequencies of good empowerment indicators observed only with political indicators (39.7%). Furthermore, regarding total empowerment indicators, it was being observed to be fair score (80.4%).

Table (5): illustrates that, the most independent affecting factors associated with women empowerment are number of children (OR=3.326, P=0.001) in which women who had children (1-2 child) were more risky for poor women empowerment three folds than women had no children and women's age at marriage (OR=2.305, P=0.041) in which young age (20 to less than 30) are more risky for poor women empowerment two folds than old age. The most independent protective factors associated with women empowerment are women's age (OR=0.414, P=<0.001) in which young age women (less than30) are (40%) protective for empowerment than old age and educational level (OR=0.357, P=<0.001) in which higher educated women are (30%) protective for women empowerment than lower educated women.

The factors which showed the same effect on women empowerment were marriage decision(OR=3.374, P=0.117) followed by women's residence (urban) (OR=1.643, P=0.156), husband education especially higher education (OR=1.260, P=0.465) , children's gender boys and girls (OR=1.182, P=0.440), age difference (less than 3 years) (OR=1.153, P=0.415), occupation especially working women (OR=1.038, P=0.929), type of family especially nuclear (OR=1.026, P=0.957), male brother; women who have not brother

(OR=1.015, P=0.983), family income ; women who have enough income (OR=0.640, P=0.088) and marital status especially married women (OR=0.252, P=0.1

Discussion

Women are discriminated and marginalized at every level of the society whether it is social participation, political participation, economic participation, access to education, and also reproductive healthcare. Women are found to be economically very poor, there are so many cases of rape, kidnapping of girl and harassment all over the world. For these reasons, women require empowerment of all kinds in order to protect themselves and to secure their purity and dignity. Thakur and Naikoo (2016).

Despite the great progress in many aspects of women's empowerment, especially in the aspects of education and health, there is still need for a comprehensive approach to empowering women focuses on the different dimensions of empowerment. The present study is an attempt to fill this gap by measuring women empowerment as a process regulated by common dimension of women empowerment such as; economic, social, political and psychological empowerment in a single study.

The current study findings revealed that the highest average score of empowerment is noted with psychological women empowerment. The second rank is achieved by political women empowerment followed by social empowerment. Furthermore, the lowest position is for health and economic empowerment.

By contrast, the study conducted by Al-Qahtani et al (2020) in Saudi Arabia who exploring the level of managerial, political, academic, economic and social women empowerment, and gave the first rank to social empowerment indicators and the last

rank to political empowerment indicators. This variation may be due to prevailing culture and the social heritage of women, and the societal culture based on customs and traditions.

Moreover, this study result revealed that total empowerment indicators among the studied women were fair score of empowerment. A study in India done by Kundu et al (2022) reported a similar result where it was revealed that a maximum of the women had a medium degree of empowerment. However, the percentage of women is not the same. The result of this study was not congruent with study done by Elgzar et al (2021) in Saudi Arabia to explore the role of self-esteem and self-efficacy in women empowerment among academic and administrative staff at Saudi universities and found that a high proportion of them have high total women empowerment . This variation may be due to difference in socio demographic characteristics including level of education and income.

To identify determinants of women empowerment, it is necessary to understand factors that can have an impact on it and predisposes them to either poor or good empowerment. The logistic regression model was used to identify different factors that have significant influence on women empowerment. The current study findings illustrated that, young age women (less than30) were (40%) protective for empowerment than old age. The finding of this study was in accord with study done by Thandar et al (2020) in Myanmar and found that women's ages of 20 to 34 and 35 to 49 have positive associations with women empowerment. The odd ratio indicates that women ages 20 to 34 1.85 times are more likely to have a high empowerment level.

Concerning educational level of studied women, higher educated women were (30%) protective for empowerment than lower educated women. The finding of this

study was in accord with the study done by Soni et al (2016) in Bangladesh to assess factors influencing empowerment level of women. The result of the logistic regression showed that women educational qualification has highly significant effects on empowerment level. As the women acquire more and more higher education, who are more likely to be in the high empowerment level.

Moreover, findings from the current study concluded that women who had children (1-2 children) were more risk for women empowerment (3) folds than women who had no children. This result matched with the study done by Ahmad (2020) in Pakistan to assess dimensions and determinants of women empowerment in developing countries, and reported that the total number of children ever born is found to be negatively associated with the working status, awareness, decision making, self-esteem. On the other hand , the findings of this study was contradicted with study conducted by Sen and Nilima (2018) in Bangladesh to assess women's empowerment and its determinants stated that mothers who have 1-2, 3-4 children are likely to have empowerment compared to women with no children. This variation may be attributed to cultural difference between countries.

In addition, the present study illustrated that women's age at marriage in which young age (20 to less than 30) are more risk for women empowerment (2) fold than old age. This finding was disagreeable with the study conducted by Soni et al (2016) in Bangladesh who stated that women who are married at age 20 or after are more highly empowered compare to earlier married women. This variation may be due to women married early are more likely to experience violence, abuse and forced sexual relations due to unequal power relations and have lower in household decision making.

Conclusion:

Based upon the results of the current study, it could be concluded that:

Women's age at marriage and women who had children (1-2 child) were the most independent affecting factors associated with women empowerment. As well as, women's age and education are the most independent protective factors associated with women empowerment.

Total empowerment indicators were (fair empowerment). The highest mean percent of empowerment indicators was related to psychological indicators followed by political indicators and social indicators. However, the lowest mean percent score observed with health indicators and economic indicators. In the light of these results on the indicators of women's empowerment, it is clear that the most prominent problem facing women lies in economic empowerment and health empowerment.

Recommendations:

Based on the results of the current research

1- Improve women's access to reproductive health care services, in particular, by removing financial barriers through mutual health insurance schemes.

2- Provide opportunities for disadvantaged and less educated women to empower themselves by developing and implementing programs that increase their access to microfinance and also to informal education.

3- Promoting gender balance in access to education across the country, by insisting on the enrolment of a higher percentage of girls in schools from the primary level**.**

4- Encourage higher education of girls rather than early marriage.

5- Performing in-depth qualitative studies aiming to evaluate women empowerment as a process that tackle determinants of different dimensions of women empowerment.

Table (1): Distribution of the studied women along with their socio demographic characteristics

Socio-demographic characteristic of the studied women	Total studied women N=807	
	N=807	%
Age		
< 30	240	29.7
30 -	233	28.9
40 -	211	26.1
50 -	92	11.4
≥ 60	31	3.9
Min-Max	18-65	
Mean±SD	36.97 ± 11.054	
Educational level		
Illiterate	71	8.8
Read and write	50	6.2
Primary	21	2.6
Preparatory	18	2.2
Secondary	304	37.7
University education	292	36.2
Post university education	51	6.3
Occupation		
House wife	400	49.6
Administrative professions	70	8.7
Medical professions (doctors, nurses, Pharmacists and Physiotherapist	282	34.9
Auxiliary services (cleaning workers and farming worker)	55	6.8
Religion		
Muslim	786	97.4
Christian	21	2.6
Residence		
Urban	412	51.1
Rural	395	48.9
Type of family		
Nuclear	635	78.7
Extended	172	21.3
Having male brother		
No	54	6.7
Yes	753	93.3

Table (2): Socio demographic characteristics of the studied women along with their relationship status

Marital status	N= 807	%
Single or engaged	80	9.9
Married	652	80.8
Divorced	30	3.7
Widow	45	5.6

Age at marriage	N= 727	%
<20	199	27.4
20 -	513	70.6
≥30	15	2.0
Min-Max	14-45	
Mean±SD	21.70 ± 3.493	
Opinion taken in marriage decision	N= 727	
No	80	11.0
Yes	647	89.0
Age difference / husband	N= 727	
<3 years	83	11.4
3 - 5 years	111	15.3
5 -10 years	355	48.8
≥10 years	178	24.5
Min-Max	1-16	
Mean±SD	6.47 ± 3.336	
Husband education	N= 652	%
Illiterate	75	11.5
Read and write	40	6.1
Primary	16	2.5
Preparatory	57	8.7
Secondary	267	41.0
University education	176	27.0
Post university education	21	3.2
Husband occupation	N= 652	%
Not working	27	4.1
Literal occupations	167	25.6
Administrative professions	145	22.2
Medical professions	21	3.2
Educational professions	95	14.6
Auxiliary services	6	1.0
free business	162	24.9
Military jobs	29	4.4
Having children	N= 727	%
No	67	9.2
Yes	660	90.8
Number of children in family	N= 660	%
1-2	282	42.7
3-4	322	48.8
≥5	56	8.5
Min-Max	0-8	
Gender	N= 660	
Boys	105	15.9
Girls	116	17.6
Both of them	439	66.5
Family income	N= 807	%
Not enough	232	28.7
Enough	476	59.0
Enough and save from it	99	12.3

Table (3): Distribution of the studied women along with the mean percent scores of total empowerment indicators

Empowerment indicators	Mean ± SD of the total
Economic indicators	
Account ownership and saving.	41.1±27.8
Control over income and or spending decisions.	53.5±23.0
Women participation and involvement of job performance.	71.7±23.6
Total economic indicators percent scores	50.3±19.6
Social indicators	
Gender equity awareness.	35.5±34.4
Attitudes of women towards raising boys and girls.	83.1±12.8
Gender based violence exposure to social violence.	43.6±21.1
Decision making abilities.	78.3±14.3
Better conscious of their rights.	54.1±16.4
Education abilities.	69.2±32.1
Total social indicators percent scores	60.6±8.6
Political indicators	
Women's participation in elections and voting rights.	55.4±39.2
Women chance of being elected to political office as men.	75.4±21.7
Total political indicators percent scores	65.4±24.8
Psychological indicators	
Self-reliance self-respect and women's dignity.	76.9±15.3
Self-esteem and self-confidence	65.5±18.6
Total psychological indicators percent scores	71.3±11.2
Health indicators	
Physical health.	60.3±18.7
Availability of health services.	53.3±32.4
Reproductive health.	65.0±13.0
Total health indicators percent scores	59.5±14.9
Total empowerment indicators percent scores	61.4±9.2

Table (4): Distribution of the studied women along with the categories of their empowerment Indicators

Empowerment indicators	N= 807	%
Economic indicators		
Poor	360	44.6
Fair	369	45.7
Good	78	9.7
Social indicators		
Poor	84	10.4
Fair	687	85.1
Good	36	4.5
Political indicators		
Poor	211	26.1
Fair	276	34.2
Good	320	39.7
Psychological indicators		
Poor	18	2.2
Fair	484	60.0
Good	305	37.8
Health indicators		
Poor	248	30.7
Fair	428	53.0
Good	131	16.3
Total empowerment indicators		
Poor	92	11.4
Fair	649	80.4
Good	66	8.2

Table (5): Multivariate analysis logistic regression for factors affecting women empowerment.

Women empowerment	P	OR	95% CI	
			L. L	U. L
Numbers of children (1-2)	0.001*	3.326	1.656	6.680
Age at marriage (20 to less than 30)	0.041*	2.305	1.033	5.146
Age (less than 30)	<0.001*	0.414	0.275	0.623
Educational level (university education)	<0.001*	0.357	0.208	0.615
Marriage decision (No)	0.117	3.374	0.738	15.435
Residence (urban)	0.156	1.643	0.827	3.262
Husband education (university)	0.465	1.260	0.677	2.345
Children's gender (both)	0.440	1.182	0.772	1.810
Age difference (less than 3 years)	0.415	1.153	0.819	1.622
Occupation (working)	0.929	1.038	0.460	2.341
Type of family (nuclear)	0.957	1.026	0.398	2.643
Male brother (No)	0.983	1.015	0.269	3.831
Family income (enough)	0.088	0.640	0.383	1.069
Marital status (married)	0.119	0.252	0.045	1.427

References

Al-Qahtani A, Ibrahim H, Elgzar W, El Sayed H and Essa R . (2021). The role of self-esteem and self-efficacy in women empowerment in the Kingdom of Saudi Arabia: A cross-sectional study. African Journal of Reproductive Health; 25(1): 69-78. DOI: 10.29063/ajrh2021/v25i1s.7

Al-Qahtani M , Alkhateeb T, Mahmood H, Abdalla M and Alkhatib M. (2020). Exploring the level of managerial, political, academic, economic and social women empowerment in Saudi Arabia;13(8):450-465

Kundu P, George L and Yesodharan R.(2022). Quality of life and empowerment among women. Journal of Education and Health Promotion; 11:185 DOI 10.4103/jehp.jehp_433_21

National Council for Women.(2017). National strategy for the empowerment of Egyptian women 2030 vision and pillars. Available at:http://ncw.gov.eg/wp-content/uploads/2018/02/final-version-national-strategy-for-the-empowerment-of-egyptian-women-2030.

Perry H. and Lauren L. (2014). Developing and strengthening community health worker programs at scale: community health worker roles and tasks. 3 [rd.] ed. USA; ch7, pp 140-145.

Sen K and Nilima S.(2018) . Women's empowerment and its determinants in Bangladesh: evidence from a National Survey. Dhaka University Journal of Science; 66(2):129-134**. DOI:** https://doi.org/10.3329/dujs.v66i2.54557

Soharwardi M and Ahmad T .(2015) . Dimensions and determinants of women empowerment in developing countries. International Journal of Sustainable Development and Planning; (6): 957-964. DOI:10.18280/ijsdp.150620

Soni M, Ireen S and Siddique A. (2016). Factors influencing empowerment level of women: a case study of Kushtia, Bangladesh .International Advanced Research Journal in Science, Engineering and Technology; 3(2). DOI :10.17148/IARJSET.2016.3221

Thandar M, Moe H and Naing W. (2020). Women's empowerment among married women aged 15 to 49 in Myanmar. Asia-Pacific Sustainable Development Journal; 26(2):57-81.

Thakur S& Naikoo A. (2016). Women empowerment and their empowering schemes in India. International Journal of Advance Research in Science Humanities and Engineering;1: 7-21

US Agency For International Development (2019). Gender equality and women's empowerment in Egypt. Available at:https://www.usaid.gov/egypt/gender-equality-and-womens-empowerment.

World Health Organization.(2022) Health topics (nursing and midwifery) . Available at :https://www.euro.who.int/en/health-topics/health-