

Pregnant women's self-care practices for relieve of minor discomforts in Dodoma Region, Tanzania

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Abstract:

Background: *Pregnancy is such a profound experience that has physiological and hormonal changes that prepare the mothers body to adjust and accommodate the growing fetus. These changes result into minor discomforts. Despite the fact that they are not life threatening, they can be bothersome. Women use a number of self-care practices to alleviate these discomforts.* **Objective:** *To identify pregnant women's self-care practices for relieve of minor discomforts in Dodoma Region, Tanzania.* **Settings:** *The study was conducted in antenatal outpatient clinics of the 7 available health facilities that represent Dodoma Region.* **Subjects:** *A convenient sample of 380 pregnant women attending the selected settings according to the inclusion criteria.* **Tools:** *Three tools were used for data collection. The first tool was Women socio-demographic characteristics structured Interview schedule. The second tool was Knowledge of pregnant women regarding minor discomfort and its management structured interview schedule. The third tool was Women's self-care practices for relieve of minor discomfort of pregnancy structured interview schedule.* **Results:** *Findings of the present study revealed that the mean age of the mother was 27.98 ± 7.66 . More than one half (55.3%) of the study subjects had poor knowledge. Approximately two third (65.5%) of pregnant women had unsatisfactory self-care practices for relieve of minor discomforts. Moreover, there was a positive correlation between knowledge and self-care practices regarding minor discomforts.* **Conclusion:** *The study concluded that most women had unsatisfactory self-care practices for relieving minor discomforts.* **Recommendations:** *Implement awareness programs linked to minor discomforts and health care practices in primary health care services.*

Key words: Self-care practices, Minor discomforts

Introduction

Each pregnancy is unique and often leaves a lifetime vivid memories for women. For some it may be an empowering and pleasant life experience but for a few others it can be uncomfortable and uneasy (Sharma & Minhas, 2021). Global health priority aims at lowering the maternal mortality rate. This goal can actually be met through making sure that women have access to high-quality

care before, during and after childbirth (WHO, 2021) . The nine months of pregnancy is a special time of course. However, the demands of it place the pregnant body under the great deal of anatomical, hormonal and physiological changes in order to adapt and support the pregnancy. Hence, certain amount of discomfort is almost inevitable (Kazemi et al., 2017) . As it is said that every pregnancy is unique, women experience these changes

differently (Kaur, 2018). Rewarding management of minor discomforts depends upon sufficient information and its self-care practices (Dhanawade, 2017).

Self-care practices are defined as a “the ability of individuals, families and communities to utilize knowledge, self-regulation, skills, abilities in order to promote and maintain health, prevent disease and cope with disability with or without the support of a healthcare provider (Albassam & Awad, 2018; WHO, 2019). Tanzania has made great effort in improving maternal health by considering self-care as one of the pillars of health care reform. A particular emphasis is kept on the provision of services to reduce maternal and child mortality (GSMA, 2018).

Even so, more often pregnant women perform different self-care practices to alleviate minor discomforts some of which may not be healthy. Hence, providing empathetic and sound advice on measures to alleviate these discomforts will aid in promoting overall health and wellbeing of pregnant women (Oluwatosin et al., 2017). So, the current study was conducted to identify pregnant women’s self-care practices for relieve of minor discomforts in Dodoma Region, Tanzania

Aim of the study

Identify pregnant women’s self-care practices for relieve of minor discomforts. This aim will be achieved through assessing knowledge and self-care practices for relieving minor discomforts.

Research question

What are the pregnant women’s self-care practices for relieve of minor discomforts in Dodoma Region Tanzania?

Materials and Method

Materials:

Research design:

A descriptive research design was utilized in this study

Settings:

The study was conducted in antenatal outpatient clinics of the 7 available health facilities that represent Dodoma Region namely: Dodoma Urban, Mpwapwa, Chemba, Chamwino, Bahi, Kongwa and Kondo.

Subjects:

The sample size was estimate using Epi info 7 statistical program using the following parameters; total population (Women who attended antenatal care per 6 months) 33,849, confidence level 95% and with 5% margin of error. The minimum sample size was estimated to be 380 women.

Inclusion criteria:

All pregnant women with normal course of pregnancy. Free from medical or obstetrical complications and willing to participate in the study.

Tools: In order to collect the necessary data for the study three tools were used:

Tool I: Socio-demographic characteristics and clinical data structured Interview schedule:

This tool focused on women’s social demographic data such as: age, level of education, marital status, current residence, occupation, housing condition and religion.

Tool II: Knowledge of pregnant women regarding minor discomfort and its management structured interview schedule:

This tool was developed by the researcher after extensive review of recent current & relevant literatures (AbdElhaliem & Mohamed, 2018; Aman, 2018) to appraise the pregnant women' knowledge regarding minor discomforts and its management. It consisted of 20 questions that covered 5 areas of knowledge regarding minor discomforts and its management among pregnant women as follows: Definition of minor discomforts (N=1), common minor discomforts of pregnancy (N=1), general causes of minor discomforts (N=1), type of minor discomfort specific to each trimester (N=3) and causes of each minor discomfort described (N= 14).

Pregnant women's knowledge was ranked as follows:

- Poor for the total score < 33.
- Fair for the total score 33 - 46.
- Good for the total score \geq 47

Tool III: Women's self-care practices for relieve of minor discomfort of pregnancy structured interview schedule

It was developed by the researcher after thorough literature review (AbdElhaliem & Mohamed, 2018; Shehata et al., 2019) to identify self-care practices in relation to relieving minor discomforts of pregnancy. It consisted of 14 questions that covered 3 domains of practices regarding minor discomforts and its management among pregnant women which involved: Any complain of minor discomforts (N=1), type of minor discomforts experienced (N=1), self-care reported practice of selected minor discomforts (N= 12).

For each area of practice, the scores of the items were represented into number of frequency then converted into a percent score. The study subject's response for each

item varied between: Done (2) and Not done (1). The total score was calculated and classified as follows:

- Satisfactory (\geq 50%)
- Unsatisfactory (< 50%).

Method

- An official letter was obtained from the vice-dean of the graduate studies Faculty of Nursing, Alexandria University to the responsible authority in Dodoma region in Tanzania to take their permission to conduct the study in the selected settings.
- Permission to conduct the study was obtained from the responsible authorities in Dodoma hospitals after explanation of the aim of the study.
- Tools (I, II &III) were developed by the researchers after reviewing relevant literature. It was validated by juries of (5) experts in the field. Recommended and necessary modifications were done accordingly.
- Cronbach Alpha Coefficient was used to ascertain the reliability of tool (II) and (III) ($r = 0.718$ for tool II and $r=0.828$ for tool III)
- Pilot study was carried out on 38 pregnant woman (who were excluded from the study subjects) to test the feasibility of the study as well as to ascertain the clarity and applicability of the tools and time of data collection. Taking into account the findings of the pilot study, necessary modifications were done
- Data was collected from women attending antenatal outpatient clinics through a structured interview schedule. During the interview, the researcher explained the content of the tools to each

study participant's. Depending on the responses and understanding of each study participants the time taken for the interview was between 25-30 minutes.

- Data collection took three months starting from October 2021 until December 2021.

Statistical Analysis

Data were fed to the computer and analyzed using IBM SPSS software package version 20.0. (Armonk, NY: IBM Corp). Qualitative data were described using number and percent. The Kolmogorov-Smirnov test was used to verify the normality of distribution. Significance of the obtained results was judged at the 5% level

Ethical consideration

- Informed written consent was obtained from every woman for her participation in the study after explaining the aim of the study; her voluntary participation and the right to withdraw from the study at any time.
- Anonymity of the study participant was considered.
- Privacy of the study participant was asserted.
- Confidentiality of the collected data was maintained.

Results

Table (1) shows the number and percent distribution of pregnant women according to their socio-demographic characteristics. It was found that, the age of the women ranged from 15 to 48 years with a mean of 27.98 ± 7.66 . Concerning to level of education, it was noticed that half (50.8%) of study subjects had primary education while, 10.3% of them had bachelor education or more level. More than one half (59.5%) of them were Christians. Majority

(97.1% & 89.5%) of pregnant women were married and working respectively. Additionally, more than two third (67.6%) of pregnant women had just enough family income and close to three quarter (71.6%) of them had nuclear family. On the other hand, More than two third (67.1% & 68.2%) of them were urban dwellers and had access to electricity respectively.

Figure (1) shows percent distribution of pregnant women according to their total score of knowledge regarding minor discomforts. It was noticed that, more than one half (55.3%) of the study subjects achieved poor total score, while only (9.5%) of pregnant women obtained good total score.

Table (2) shows number and percent distribution of pregnant women according to Self-care practices for relieving minor discomforts. As far as practices are concerned, the most common self-care practices reported by pregnant women to manage different minor discomforts of pregnancy were as follows; In relation to nausea and vomiting, it was noted that a sizeable proportion (78.1%) of pregnant women avoided spicy food and ate dry carbohydrate meal on awakening. In addition to constipation, it was observed that more than three quarter (76.6%) of them increased taking fruit and vegetables. Regarding leucorrhoea, it was noted that more than one half (59.1%) of women wore cotton underwear. Moreover, in relation to, self-care practices for relieving frequent urination, it was exhibited that 66.7% of participants decreased fluid intake in the evening. With reference to heartburn a sizable proportion (71.6%) of pregnant women avoided fried, spicy or rich fatty foods. In addition to alleviating pica, more than one half (68.4%) of them were chewing gum. Concerning practices to alleviate leg cramp it was noted that more than three

quarter (76.9%) of women were performing leg exercises. In addition to backache it was reported that a sizable proportion of them (70.5%) wore shoes with low heels. Majority (81.7%) of women with fatigue preferred resting. Nearly two third of women (65.4%) who suffered from dyspnea were sleeping with head and chest elevated. Regarding to, ankle edema (70%) of women wore loose, comfortable clothing to manage it. More than two third (67.9%) of the study subjects with hemorrhoids were avoiding constipation by daily bowel evacuation and took a warm bath to alleviate the discomfort.

Figure (2) illustrates percent distribution of pregnant women according to total score of self-care practices for relieve of minor discomforts. It was noted that, approximately two third (65.5%) of pregnant women had unsatisfactory self-care practices compared to more than one third (34.5%) of those who had satisfactory self-care practices.

Figure (3) illustrate correlation between total score of knowledge and self-care practices regarding minor discomforts. There was a positive correlation coefficient between the total score of knowledge and self-care practices regarding minor discomforts, and it was highly statistically significant ($P < 0.001$).

Discussion

There is an imminent indication that, quality antenatal care and education is crucial for a positive pregnancy outcome. But even so, a healthy pregnancy is highly influenced by pregnant women self-care practices (Devkate et al., 2022; Doaa et al., 2022). Knowledge and awareness regarding minor discomforts of pregnancy is crucial for its management (Sharma et al., 2020). The current study found that more than one half of pregnant women had poor knowledge

regarding minor discomforts. These results may be attributed to the fact that, there was unavailability of electricity in more than one third of homes. The world is changing and so is technology. Most useful information nowadays can be easily accessed through internet and mass media. So, without reliable electricity it is challenging to access health information regarding minor discomfort and its self-care practices from the media and all digital platforms.

Consistent results were found from a study done by Vincent (2017), where results found that, more than one half of pregnant women had poor knowledge regarding minor discomforts (Vincent et al., 2017). On the other hand, findings of the present study were not in accordance with a study conducted by Devkate et al. (2022), which found that, a sizable proportion of pregnant women had a fair total score of knowledge while very few of them had poor knowledge (Devkate et al., 2022). The disagreement between the findings may be due to difference in quality of health services.

Regarding self-care practices for relieve of minor discomforts, pregnant women were performing various practices to manage minor discomforts such as avoiding spicy food for managing nausea and vomiting, increased intake of fruit and vegetables for constipation, wearing cotton underwear for leucorrhoea, decreased fluid intake in the evening for frequent urination, avoid spicy foods for heartburn and performing leg exercise to manage leg cramps. For backache wearing shoes with low heels were the most preferred practice while avoiding constipation was practiced by those who experienced hemorrhoids.

These results were congruent with findings of Rizk et al. (2019) who reported that pregnant women consumed 6 small meals and ate dry carbohydrate meal on awakening

to manage nausea and vomiting, avoided spicy foods to manage heartburn, wore low heels to manage backache. Also women who experienced leg edema managed it by avoiding long period of sitting and standing and elevated legs higher than the heart level (Rizk et al., 2019). Similarly, findings of the present study are consistent with that of Shehata et al. (2019) who reported that women who experienced constipation increased intake of fruit and vegetables and had regular defecation. For women with leucorrhoea close to one half of them wore cotton underwear to manage it (Shehata et al., 2019).

With respect to total score of self-care practices for relieve of minor discomforts, it was clarified that approximately two third of pregnant women had unsatisfactory self-care practices compared to more than one third of those who had satisfactory self-care practices. These results may be attributed to the fact that, about one half of the study subjects had only primary education. It is obvious that the chance of reading and understanding the information regarding self-care practices that appear in magazines, news and internet is likely higher for educated women (Tesfaye et al., 2017).

The current results are partially similar to the findings of El Refaey (2020) done in Benha, Egypt. It was reported that more than one half of their study sample had unsatisfactory self-care practices while, two fifth of them had satisfactory self-care practices (El-Refaeey et al., 2020). However, this same result does not fit with the findings of Abdelhaliem & Mohamed (2018), whose results indicated that majority of pregnant women had satisfactory self-care practice, while only few of them had unsatisfactory self-care practice post intervention (Abdelhaliem & Mohamed, 2018).

Moreover, findings of the current study indicated that there was a positive correlation coefficient between total score of knowledge and self-care practices regarding minor discomforts and it was highly statistically significant at $P < 0.001$. This finding was congruent with that of El-Refaeey et al. (2020) who found a positive correlation between total score of knowledge and self-care practices and it was highly statistically significant (El-Refaeey et al., 2020). This similarity is validated by relevant literatures. It reports that adequate knowledge equips pregnant women with reliable skills and capacity to manage and seek health care in case of any discomforts or danger sign encountered during pregnancy (WHO, 2019).

Conclusion:

Based upon the findings of the current study, it can be concluded that women had poor knowledge regarding minor discomforts. Furthermore, self-care practices for relieve of minor discomforts were generally unsatisfactory. There was a positive correlation between total score of knowledge and total score of self-care practices for relieve of minor discomforts.

Recommendations

Based on the findings from the study the following recommendations are suggested

1. Implement awareness programs linked to minor discomforts and health care practices in primary health care services.
2. Collaborating with stake holders and media in offering illustrated materials regarding minor discomforts and their self-care practices.

3. Enforcing community outreach health education programs for the disadvantaged communities and those women who live far away from the health centers.

Table (1): Number and percent distribution of pregnant women according to their socio-demographic characteristics

Socio-demographic characteristics	No (380)	%
Age		
<20	61	16.1
20 - <30	172	45.3
30+	147	38.7
Mean ± SD.	27.98 ± 7.66	
Level of education		
Read and write	51	13.4
Primary	193	50.8
Secondary	97	25.5
University and above	39	10.3
Religion		
Christian	226	59.5
Muslim	154	40.5
Marital status		
Married	369	97.1
Divorced	7	1.8
Widowed	4	1.1
Occupation		
Employed	340	89.5
House wife	40	10.5
Family income/month		
Just enough	257	67.6
More than enough	18	4.7
Not enough	105	27.6
Family type		
Nuclear	272	71.6
Extended	108	28.4
Original residence		
Rural	125	32.9
Urban	255	67.1
Housing condition		
Water	94	24.7
Electricity	259	68.2
Sewage disposal	27	7.1

Figure (1): Percent distribution of pregnant women according to their total score of knowledge regarding minor discomforts

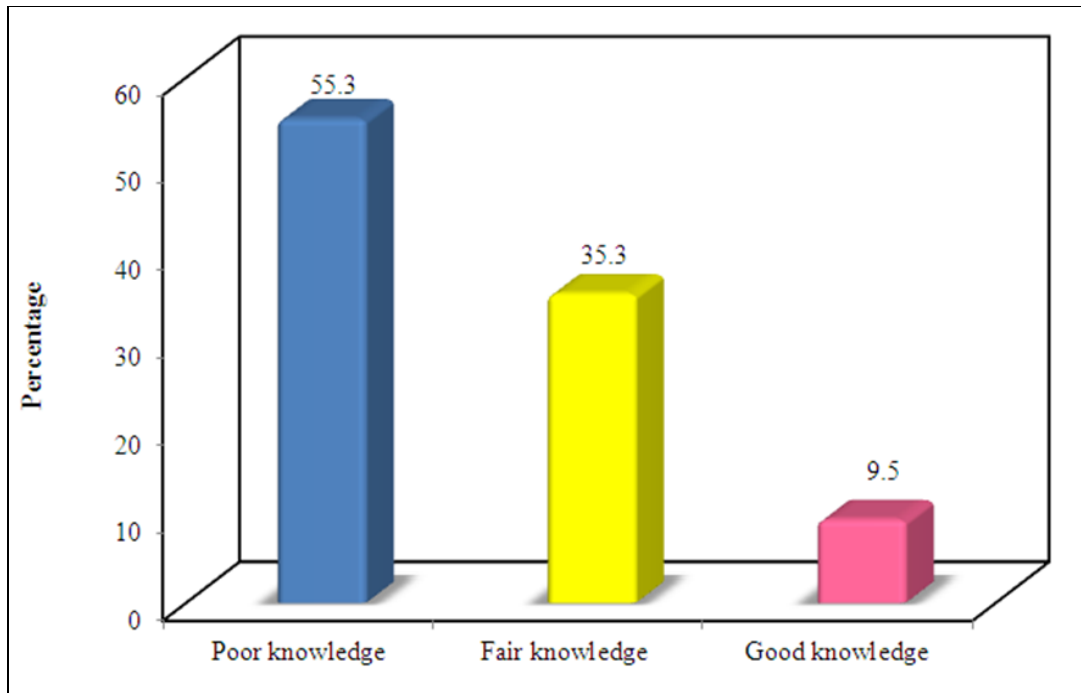


Figure (2): Percent distribution of pregnant women according to total score of self-care practices for relieve of minor discomforts

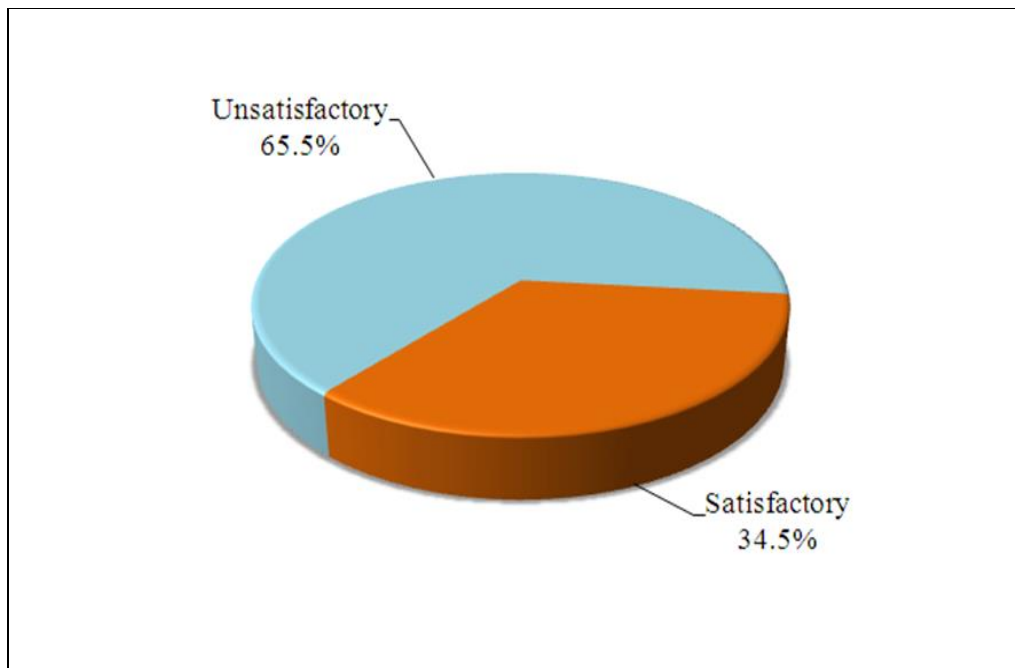


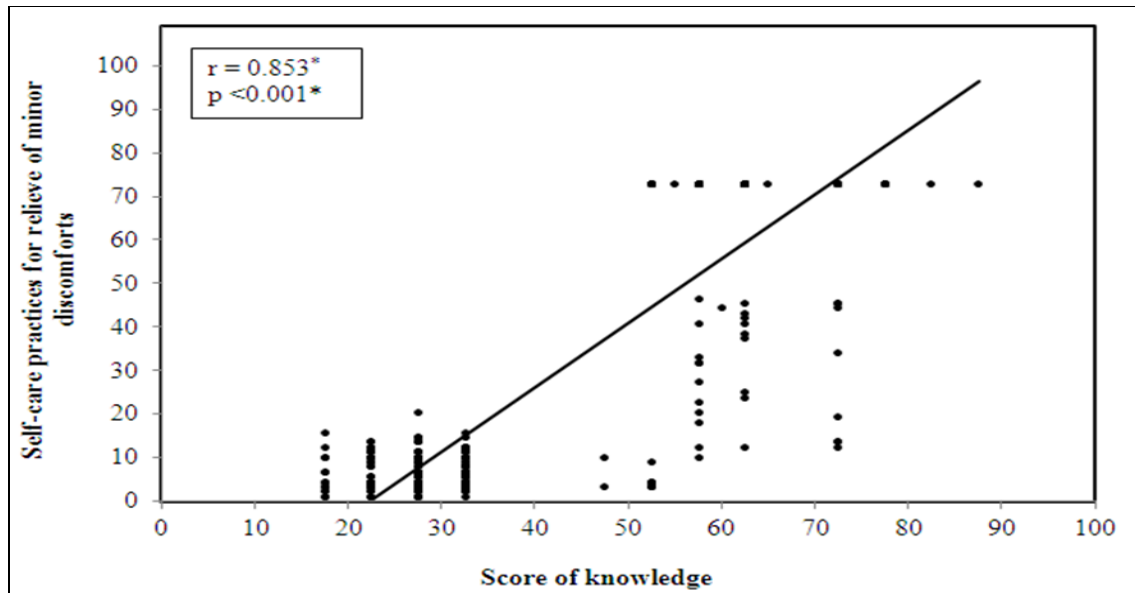
Table (2): Number and percent distribution of pregnant women according to self-care practices for relieve of minor discomforts.

Self-care practices for relieve of minor Discomforts	Done		Not done		Total	
	No.	%	No.	%	No.	%
Nausea and vomiting (n = 292)						
Eating dry carbohydrate meal on awakening	173	59.2	119	40.8	292	100
Avoid spicy food	228	78.1	64	21.9	292	100
Decrease tea/coffee intake	168	57.5	124	42.5	292	100
Intake of small frequent meals	163	55.8	129	44.2	292	100
Herbal remedies	165	56.5	127	43.5	292	100
Taking medication as doctors order	152	52.1	140	47.9	292	100
Constipation (n = 261)						
Increase intake of fruit and vegetables	200	76.6	61	23.4	261	100
Drinking water	187	71.6	74	28.4	261	100
Regular timing of defecation	156	59.8	105	40.2	261	100
Traditional remedies	156	59.8	105	40.2	261	100
Taking medication as doctors order	146	55.9	115	44.1	261	100
Leucorrhoea (n = 276)						
Wear cotton underwear	163	59.1	113	40.9	276	100
Vagina suppositories	164	59.4	112	40.6	276	100
Rinse perineal area from front to back	159	57.6	117	42.4	276	100
Keep perineal area clean and dry	160	58.0	116	42.0	276	100
Traditional remedies	142	51.4	134	48.6	276	100
Taking medication as doctors order	141	51.1	135	48.9	276	100
Frequent urination (n = 285)						
Decrease fluid intake in the evening	190	66.7	95	33.3	285	100
Frequent bladder evacuation during the day	177	62.1	108	37.9	285	100
Use warm water in washing	159	55.8	126	44.2	285	100
Traditional remedies	160	56.1	125	43.9	285	100
Taking medication as doctors order	153	53.7	132	46.3	285	100
Heartburn (n = 275)						
Intake of small frequent meals	162	58.9	113	41.1	275	100
Avoid fried, spicy, or rich (fatty) foods	197	71.6	78	28.4	275	100
Keep the head of the bed higher than the foot of the bed	158	57.5	117	42.5	275	100
Traditional remedies	165	60.0	110	40.0	275	100
Taking medication as doctors order	151	54.9	124	45.1	275	100
Pica (n = 253)						
Chewing gum	173	68.4	80	31.6	253	100
Traditional remedies	163	64.4	90	35.6	253	100
Taking medication as doctors order	139	54.9	114	45.1	253	100

Table (2): Cont.

Self-care practices for relieve of minor discomforts	Done		Not done		Total	
	No.	%	No.	%	No.	%
Leg cramp (n = 273)						
Perform leg exercises	210	76.9	63	23.1	273	100
Elevating lower extremities frequently	171	62.6	102	37.4	273	100
Limit amount of milk to reduce amount of phosphorus	157	57.5	116	42.5	273	100
Traditional remedies	164	60.1	109	39.9	273	100
Taking medication as doctors order	152	55.7	121	44.3	273	100
Backache (n = 264)						
Practice pelvic exercises	188	71.2	76	28.8	264	100
Wearing shoes with low heels	186	70.5	78	29.5	264	100
Taking a warm bath daily	155	58.7	109	41.3	264	100
Avoid bending when lifting objects	151	57.2	113	42.8	264	100
Traditional remedies	156	59.1	108	40.9	264	100
Taking medication as doctors order	151	57.2	113	42.8	264	100
Fatigue (n = 273)						
Resting	223	81.7	50	18.3	273	100
Taking balanced diet	162	59.3	111	40.7	273	100
Reduce activities	172	63.0	101	37.0	273	100
Traditional remedies	167	61.2	106	38.8	273	100
Taking medication as doctors order	155	56.8	118	43.2	273	100
Dyspnea (n = 263)						
Sleep with head and chest elevated	172	65.4	91	34.6	263	100
Wear loose and comfortable clothes during bed time	169	64.3	94	35.7	263	100
Limit activities during the day	164	62.4	99	37.6	263	100
Good posture when sitting	135	51.3	128	48.7	263	100
Traditional remedies	134	51.0	129	49.0	263	100
Taking medication as doctors order	131	49.8	132	50.2	263	100
Hemorrhoids (n = 234)						
Avoiding constipation by daily bowel evacuation	159	67.9	75	32.1	234	100
Take a warm bath with baking soda in the water	158	67.5	76	32.5	234	100
Avoid sitting for long periods	152	65.0	82	35.0	234	100
Apply cold compressors	140	59.8	94	40.2	234	100
Traditional remedies	143	61.1	91	38.9	234	100
Taking medication as doctors order	141	60.3	93	39.7	234	100
Ankle edema (n = 243)						
Wear loose, comfortable clothing	157	64.6	86	35.4	243	100
Wear support stockings	143	58.8	100	41.2	243	100
Elevate legs higher than the heart level	170	70.0	73	30.0	243	100
Foot and leg exercise	148	60.9	95	39.1	243	100
Traditional remedies	138	56.8	105	43.2	243	100
Taking medication as doctors order	131	53.9	112	46.1	243	100

Figure (3): Correlation between total score of knowledge and self-care practices regarding minor discomforts.



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