Meeting the Clothing Needs of Pregnant Women in Imo State

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Abstract
This study determined ways of meeting the clothing needs of pregnant women in Imo state. Two research questions were raised for the study. One null hypothesis was tested at 0.05 level of significance. Survey research design was used. The population for the study comprised 7381 respondents consisting of 7120 pregnant women, 105 midwives/nurses and 156 Home Economics teachers. The sample size was 530 which comprised 396 pregnant women, 54 nurses and 80 Home Economics teachers drawn from both Urban and rural locations in Imo State. Questionnaire was used for data collection. Data were analyzed using mean, standard deviation and t-test. Results indicate that wearing of tight clothes, corsets, girdles, and narrow high heeled and spike heeled shoes predisposed the pregnant women to health problems. It was recommended that pregnant women should be educated on their clothing needs and factors to consider when purchasing maternity clothing by the nurses during their ante-natal sessions in the clinic.

Key word: Clothing, Needs and Pregnancy and Women.

Introduction
A pregnant woman is one who is carrying a developing fetus in her womb for about nine calendar or ten lunar months. During this period the body undergoes some changes. The changes occur both physically and physiologically (Patrea & Blazena, 2010). The physical changes common to pregnant women include enlargement

of the abdomen, breast and darkening of the nipples. These physical changes imply changes in the clothing needs of the pregnant women. The need comfortable clothes that will take care of their changing body size and shape (Ashleigh, 2013).

Anwesha (2011) stated that pregnant women should wear comfortable clothing during pregnancy for it makes them feel at peace. Dresses that are tight around the waist areas are not comfortable for pregnant women. Secondly, pregnant women usually sweat so much; hence, tight clothing makes them feel very uncomfortable. Rios, Chen, Rios-chen, Fillo, Amorim, Lin, & Vogt (2017) reported that tight clothing may predispose one to breast cancer (e.g. wearing very tight bra), it can impede the blood circulation in the veins and it can increase susceptibility to varicose vein and edema (Towler, 2002) and Myles, 2005). Further, Offor (2002) emphasized that inappropriate clothing worn by pregnant women can predispose them to infection, diseases and mal-presentation or even death of the baby in the womb. Therefore, they need maternity clothes to accommodate the expanding physical body changes (enlargement of the stomach). The essential features of maternity clothing include clothes that have expandable features or provide room for expansion of the stomach e.g. gathered and flared waist and bust line dresses. Maternity clothes are described by Blunnin (2001) and Norah (2011) as special clothes worn by pregnant women to accommodate physical changes associated with pregnancy periods.

Maternity clothes should be dresses that should not hamper the growth of the baby and clothes that provide support to the heavy weight of the tummy (Warson, 2015). Mom, (2015) reported that the best clothes for pregnant women are clothes that allow for expansion of the abdominal area as it is very necessary for both the mother and the baby in the womb. Supporting this, Vitma (2015) concludes that most pregnant women start wearing maternity clothes when they begin to feel uncomfortable in their old tighter fitting clothes. She noted that size of the growing uterus is one of the factors that influence the time when pregnant women start wearing maternity clothes. As the uterus is growing the breasts are growing as well. Other factors which determine when pregnant women start using maternity clothing include the number of babies on board, weight gain, differences in body size and shape and the individual clothing choice.

Clothing choices of pregnant women vary depending on the type of job and businesses they engage themselves in. Most of them like to wear flattering clothes that exposes their body parts. Ohaka and Igbo (2012) stated that pregnant women wear clothes that exposes sensitive parts of their body like the erogenous zone suggesting careless life styles as well as contravening the values, ideas and norms of the society in which they live. Such life styles attract rebuke, provoking abuses and curses. The case is not different with pregnant women in Imo State.

In Imo state the pregnant women either live in urban or rural areas in the state. The urban pregnant women have access to information and communication technology (ICT) and the internet and these influence their dressing pattern as they dress to catch up with moving fashion. On the other hand the rural pregnant women dress poorly and in manners uncomplimentary to the clothing needs of pregnant women (Emelue, 2004). Therefore, it is necessary to communicate to the pregnant women and future mothers what constitutes the clothing needs of pregnant women by the nurses who attend to them during their ante-natal visit and Home Economics teachers who teach Clothing and Textiles/Home Economics in the secondary schools in the state.

Efforts have been made by researchers such as Emelue (2004) and Agbo (2013) on wardrobe management practices of pregnant women. Also, Ohaka and Igbo (2012) carried out a study on determinates of functionality in clothing of pregnant women with one of the specific objectives as ways of providing clothing for pregnant women. None of these works centered on meeting the clothing needs of pregnant women. It is this gap that the study seeks to bridge.

Purpose of the Study
The general purpose of the study was to find out ways of meeting the clothing needs of pregnant women in Imo state. Specifically the study identified:
1. clothing needs of pregnant women.

2. factors to consider when purchasing maternity clothing.

Research Questions:
The following research questions guided the study
1. What are the clothing needs of pregnant women?
2. What are the factors to consider when purchasing maternity clothing?

Hypothesis of the Study:
The null hypothesis that guided the study is stated below:
There is no significant difference between the mean response of nurses and Home Economics Teachers on clothing needs of pregnant women.

Methodology
Design of the Study: Survey research design was adopted for the study.
Area of the Study: The study was carried out in Imo state. Imo State comprises three senatorial zones (Owerri, Okigwe and Orlu) with various public and private hospitals located within the zones.
Population for the study: The population for the study was7381 consisting of three different groups namely: 7120 registered pregnant women in government owned general hospitals and the teaching hospital in the state, 105 trained nurses who work in the ante-natal section of the hospitals and 156 Home Economics teachers in public secondary schools in Imo state all in the year 2014 to 2015 (Imo State Health Management Board, (2014) and

Imo State Secondary Education Management Board (2014).

Sample and Sampling Technique: Multistage random sampling technique was used to select 530 respondents. The first stage was stratifying the state into local government areas (LGAs) followed by selection of LGAs according to location (urban and rural). Secondly four hospitals each were randomly selected from the urban and rural LGAs in the state. The Third stage was random selection of 319 urban registered pregnant women and 77 rural registered pregnant women, 32 urban nurses and 22 rural nurses and 59 urban Home Economics teacher and 21 rural Home Economics teachers bringing the sample size to 530 for the study.

Instrument for Data Collection: Questionnaire was the instrument used for data collection with five point likert rating scale. The questionnaire sought information on the clothing need of pregnant women and factors to consider when purchasing pregnancy clothing. The scaling point and their respective numerical values were strongly Agree (5), Agree (4), Undecided (3), Disagree (2), and Strongly Disagree (1). The instrument was face validated by three experts and pre-tested using 13 pregnant women, four nurses and three Home Economics teachers to test the internal consistency of the instrument. A reliability coefficient of 0.995 and 0.86 were obtained for the two research questions one and two respectively using Cronbach Alpha.

Method of Data Collection and Analysis: Data collection was carried out through personal contact with the help of research assistants. A total of 530 copies of questionnaire were administered and all were retrieved giving 100% return rate. Frequency, mean score and standard deviation were used to analyze the research questions and cut off mark of 3.5 was used as decision rule. While t-test statistics was used to analyze the hypothesis at .05 level of significance.

Results

Table 1: Mean Responses and t-test Analysis of Nurses and Home Economics Teachers on Clothing Needs of Pregnant Women.

s/n	Clothing needs of pregnant women	$\overline{X}_1$	SD_1	Remark	$\overline{X}_2$	SD_2	Remark	t-cal	Dec
1	Well fitted bra	3.65	1.03	Agree	4.11	2.02	Agree	-0.15	NS
2	Bra with wide shoulder and adjustable Cups	4.07	2.30	Agree	3.31	0.52	Agree	0.27	NS
3	Clothing to meet weather conditions	3.31	0.63	Agree	4.39	3.08	Agree	-0.29	NS
4	Cotton fabric to keep the body cool	3.67	1.07	Agree	4.02	3.32	Agree	-0.16	NS
5	Non restricting clothing	3.52	0.81	Agree	3.28	0.51	Agree	0.18	NS
6	Attractive clothing	3.67	1.07	Agree	3.09	1.39	Agree	-0.09	NS
7	Low heeled shoes	3.61	0.96	Agree	4.11	2.02	Agree	-0.17	NS
8	Shoes that are not too tight	3.74	1.24	Agree	3.78	1.09	Agree	-0.01	NS
9	Swing shirt	3.62	1.00	Agree	4.48	0.62	Agree	0.96	NS
10	Highly absorbent fabrics	4.11	2.45	Agree	3.03	1.20	Agree	0.80	NS
11	Clothing with adjustable waistline	3.07	1.60	Agree	3.81	1.17	Agree	0.02	NS
12	Clothes with fullness at the waist line	3.31	1.63	Agree	3.73	0.99	Agree	-0.25	NS
13	A line dresses that flare from the top	4.26	3.10	Agree	3.68	0.91	Agree	0.14	NS
14	Light weight clothing	3.39	0.67	Agree	3.86	1.29	Agree	-0.24	NS
15	Empire tops/dresses	4.17	2.68	Agree	3.96	1.55	Agree	0.05	NS

Key: X_1= mean of the Nurses, X_2= mean for Home Economics Teachers, NS= not significant, SD_1= standard deviation for nurses, SD_2 standard deviation for Home Economics Teachers, N_1= number of nurses (54), N_2= number of Home Economics Teachers (80), t-cal= t-calculated value, t-tab= t-table value 1.96.

Table 1indicates that both the nurses and home economics teachers agree on the clothing needs of pregnant women since the value of each group of respondents is above the cut-off mean scores. Almost all the items had low standard deviations showing that the deviations from the mean are very low. Also, all the items were agreed as clothing needs of pregnant women by both the nurses and the pregnant women.

Table 2: Mean Responses of Pregnant Women, Nurses and Home Economics Teachers on Factors to Consider When Buying Maternity Clothes

s/n	Factors	$\overline{X_1}$	$\overline{X_2}$	$\overline{X_3}$	$\overline{Xg}$	SD	Remarks
1	Cloth with classic and timeless design	3.62	3.90	3.94	3.82	0.63	Agree
2	Soft and comfortable cloth	4.12	3.98	4.05	4.05	0.48	Agree
3	Size of clothes	3.46	3.80	4.32	3.86	0.65	Agree
4	Colour of clothes	3.46	3.40	3.43	3.43	0.29	Agree
5	Money available	3.13	3.19	3.11	3.14	0.32	Agree
6	Garment style	3.92	3.80	3.94	3.88	0.66	Agree
7	individual life style	3.88	3.97	4.12	3.99	0.74	Agree
8	Pregnancy stage	3.61	3.68	3.62	3.64	0.52	Agree
9	Care label	3.29	3.46	3.42	3.39	0.67	Agree
10	Garment fit	3.46	4.07	4.05	3.86	1.29	Agree
11	dresses that provide support to the body	3.91	3.93	3.32	3.72	1.20	Agree
12	Strong stretchy fabric	3.62	3.46	3.48	3.52	0.66	Agree
13	Cool and absorbent cloth	4.10	4.06	4.11	4.09	0.37	Agree
14	quality of the cloth	3.87	3.40	3.74	3.67	1.07	Agree

Key: $\overline{X_1}$= Pregnant Women; $\overline{X_2}$= Nurses; $\overline{X_3}$= Home Economics Teachers; $\overline{Xg}$= grand mean, SD=standard deviation, N= 530

Table 2 shows certain factors that are of importance that should be considered when purchasing maternity clothes with means 3.0 and above. All the factors were accepted. They include size of dresses, colour, and garment style, quality of clothes, finance and garment fit, among others.

Discussion
The findings of the study on clothing needs of pregnant women in Table 1 reviewed that pregnant women need soft and comfortable clothes, well fitted bra, bra wide shoulder straps and adjustable cups, cotton fabrics, shoes with low and wide heel base, loose flowing clothes, fabrics that are highly absorbent and clothes with extra fullness. Low heeled shoes should be worn by pregnant women to balance the body and to prevent accidents and backache (Offor 2002). Pregnancy phase is characterized physical transformation of the body accompanied with enlargement of body parts especially the breast and stomach, so, it is necessary for them wear loose clothes that are soft and comfortable to provide support to the stomach. Pregnancy is also characterized by indigestion; therefore, wearing tight clothing around the waist will make them feel uncomfortable. Fitted bra with wide shoulder straps and adjustable cups give support to the enlarged breast. More so, without the right bra, the tops and dresses will not look flattering (Patty, 2013). Loose flowing clothes allow baby's movement and free flow of blood to the stomach. Hence, Mom (2015) advised that tight clothing should not be worn by pregnant mothers for it obstructs the baby's movement and restricts the flow of blood to the stomach. Merenstein and Gardner

(2000) stated that the changing breast size promotes healthy functioning of the lymphatic and milk producing system of the breast during pregnancy. This makes it very necessary for correct bra to be worn during pregnancy. Bra with wide shoulder strap helps to hold the increased size of the breast. The findings of the study is in line with the findings of the study carried out by Ashley (2015) and Jone (2015) who concluded that comfortable and absorbent clothing is of great importance to pregnant women for it helps to cool their body. Pregnant women always feel hot as a result of hormonal changes in the body and they sweat profusely. So, they need soft absorbent clothes to absorb the excessive sweat. Agbo (2013) reported that uncomfortable maternity clothing can lead to a feeling of isolation and unwholesome attitude of a pregnant women towards colleagues' at work place and that it can also lead to low productivity, moreover, the baby's comfort should be considered. Most often, their comfort can be determined by the type of clothing they put on. Breathable fabrics, patterns or solid colours are accepted as clothing needs of pregnant women. Natural fabrics such as cotton and modal that are soft and breathable are of great help in controlling hot flashes and itching that are common with pregnancy.

However, pregnant women's awareness of their clothing need entails that they and their husband should provide finance for provision of appropriate maternity clothing. Unavailability of finance is one of the problems they encounter in providing their clothing need which may lead to purchase of low quality clothing. Poorly made maternity clothes fall apart quickly, are not colour fast, may shrink, pull, fray, itch, and sometimes make them feel hot. These possess problems to the comfort of the pregnant women and it is recommended as one of the factors to be considered when purchasing maternity clothing.

Table 2 shows that clothes that are cool and absorbent are highest factor to consider by the pregnant women (4.09) when purchasing maternity clothing followed by soft and comfortable clothes (4.05), individual life style (3.99), garment style (3.88), garment fit (3.86), size of garment (3.86) and garment size (3.86). Finance is the least (3.14) among the factors. The findings is in agreement with the findings of Anwesha (2011) who indentified that cool, absorbent and comfortable clothing are the most important factors to consider when purchasing maternity clothing. However, the study's findings is not consistent with the findings of Mom (2015) who concluded that size of clothes is the most important factor to consider when buying maternity clothing. The agreement that cool, absorbent and comfortable clothing are one of the most important factors that should be considered when purchasing clothes is not surprising because pregnant women always feel hot during pregnancy so, it will help them to feel comfortable and relaxed. Also, they sweat and feel exasperated with heat hence; they need absorbent clothes to absorb excessive heat as a result of

pregnancy. Likewise size was also accepted as one of the factors. This is because dresses that have allowance on the tummy, arms, hips and chest areas are the perfect choice as they provide room for the growing sizes of the body parts during pregnancy. More so, stretchy clothes have been identified as one of the factors. Acceptance of stretchy fabric, clothing with adjustable waistline and hemline are in agreement with the findings of Krieger (2012) who recommended that stretch fabric like lycra and spandex give room for expansion of the body and allow for easy movement. They also provide shape retention that is required to accommodate the body as it changes. This supports the findings of several studies which suggested that stretchy fabric provides room for the growing stomach (Petra & Bazena 2010, and Ebay, 2014).

Conclusion

The study concludes that both the nurses and the pregnant women were aware of the clothing needs of pregnant women. It implies that most pregnant women wearing inappropriate clothing may be in an attempt to appear fashionable, flattering or because of their inability to provide appropriate pregnancy clothing. It is then imperative for the nurses to lay more emphasis on the importance of pregnant women wearing appropriate clothing during their ante-natal talk in the hospitals. Since the pregnant women desire to appear fashionable and attractive, the garment features or factors that will allow them achieve this

should also be communicated to them by the nurses. This will enable them to make right choices whenever they are purchasing maternity clothing.

Recommendations

- Pregnant women should acquire clothing based on their clothing needs.
- Pregnant women should purchase good quality and comfortable clothes that can ensure serviceability and durability.
- Nurses should lay more emphasis on clothing needs of pregnant women and consequences of inappropriate clothing worn by pregnant women during their ante-natal talk in the hospital.
- Efforts should be made by Home Economics teachers toward giving effective classroom instructions to their students who are future mothers on clothing needs and factors to consider when purchasing maternity clothing.

References

Agbo, D.A. (2013). Wardrobe management practices of pregnant teachers in Makurdi. *Journal of Home Economics Research*, 18, 79-88

Anwesha, B. (2011). Importance of comfortable clothes for pregnant women. www.blodsky.com/pregnancy-parenting/prenatal.

Ashleigh, B. (2013). Maternity wear: To conceal or reveal? earlymodernmedicine.com/maternity-wear-to-conceal-or-reveal.

Ashley, E. (2015). 6 affordable ways to get stylish maternity and pregnancy clothes.

www.moneycrashers.com/sylish-cheap-maternitypregnancyclothes.

Blunin, J. (2001). People love it. http//www.maternity-clothing-fashion.com.

Ebay, E. (2014). Your guide to buying flattering maternity clothes. www.ebay.com....ebay.

Emelue, F. (2004). Wardrobe management practices of working class women in Delta State. *Unpulished M.ed Thesis Department of vocational Teacher Education, University of Nigeria Nssuka.*

Imo State Health Management Board, (2014). General Hospitals Register. Owerri: ISHAMB Publishers.

Imo State Secondary Education Management Board (2014). Teachers Regiser.

Jone, W. (2015).Maternity clothes: The perfect fit for comfort and style. www.maternityclothes.com/perfectfit.

Krieger, L. (2012). Maternity clothes advice, review and article/-flash player installation. www.babycenter.com/pregnancy-style.

Marriott, H. (2016). Is maternity wear becoming a thing of the past in fashion. https://www.the guardian. Com.

Merenstein, G.B & Gardner, S. L. (2002). *Hand book of national intensive care. 5th ed.* Missouri: Mosby.

Mom, J. (2015). What are the right pregnancy clothes during pregnancy? www.momjunction.com>pregnancy>safety.

Myles, A. (2005). *A test book for midwives.* Edinburgh and London: Churchill Living Stone.

Norah, W (2011). *The cut of women's clothes.* London: Routledge.

Offor, I. N (2002). Beauty and the regime of artificially. The Serge Magazine 115 ISSN (155-834).

Ohaka, A. R. & Igbo C. N. (2012). Determinates of functionality in the clothing of pregnant women in Imo State. *Journal of Occupation and Training (JOT), 5,* 3, 60-66.

Patty, A. M (2013). Maternity clothes: The do's and don'ts of dressing your growing bump. www.parents. Com/blogs/everythingpregnancy.

Petra, K. & Blazena, M. (2010). Pattern construction of maternity wear. www. patrakomarkora @tul.cz.blazena. musilova @tul.cz.

Rios, S. S. S; Chen, A. C. R.; Rios-chen, J.; Fillo, C. M. C.; Amorim, N. T. S.; Lin, C. W.; & Vogt, M. D. B. (2017). Wearing tight clothing for many hours a day is associated with increased risk of breast cancer. *Advances in Oncology Research and Treatments, 1* 105-113.

Taram, M. B. (2015). Six tips for buying maternity clothes/second trimester.www.prgnancyorg/article/six-tipsforbuy.

Towler, J. (2002). *Modern obstetrics for students midwives.* London: Lloudlike Medical Book Ltd.

Vitma, R. (2015). When do most women start wearing maternity clothes. On line; pregnancy.covetoknow.com>health>pregnancy>maternity wear.

Warson, J. (2015) Maternity clothes: choose the perfect fit for comfort and style. On line: www.empowher.com> Relationships/family pregnancy.