

## **USED CLOTHING TREATMENT PRACTICES AND SAFETY AMONG TRADERS IN THE CAPE COAST METROPOLIS**

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**ABSTRACT:** *This study aimed at exploring treatment practices and protective measures used clothing traders observe to ensure safety in handling of the used clothing. Purposive and convenience sampling techniques were used to reach ten (10) used clothing traders. Structured interview schedule and observation checklist were the main instruments used to collect data. The mixed method approach was adopted to collect and analyse data. The results of the study indicated traders sorted out the used clothing into categories often than stain removal, repairing, washing and ironing before sale. Dusting (40%) and repair/alteration (30%) were the most observed treatments traders performed. The use of apron, hand washing and use of sanitizers were basic protective measures observed. Key safety measures such as use of hand gloves, eye protection devices, nose and mouth masks were ignored by the traders. The study concludes that possible health risks were found not to be under control hence, the need for public education.*

**KEYWORDS:** *used clothing, treatment practices, health risk*

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### **INTRODUCTION**

Global growing interest in sustainable behaviour is translated in clothing consumption behaviour. The concerns by environmental experts to promoting sustainable environment have bearing on clothing recycling. Clothes recycle options may include re-using, re-selling and disposal. Used clothing travels the world and has an economic ripple effects that far exceeds expectations (Megginis, 2012). Global trade in used clothing keeps increasing with sharp estimated values (Norris, 2012; Fields, 2008). Baden and Barber (2005) found United States, Netherlands and Japan as major exporters of used clothing while major importers and consumers are from developing countries with 30% of the total export going to Sub-Saharan African countries. A study conducted in 1997 by the Swiss Academy for Development indicating that about 90% of the Ghanaians consume used clothes (Farrant, 2008). This proportion could even be higher if records were given in volumes.

Used clothing trade appears beneficial to patrons in developing countries. There are diverse supporting business activities, Peterson and Balasubramanian (2002); with social networking systems for advertising and patronage (Mkhize, 2003). Jobs created in the used clothing industry range from large and small-scale dealers, market traders to itinerant peddlers, augmented by tailors, alterationists and launderers (Field, 2007; Baden & Barber, 2005; and Hansen, 2004). In spite of benefits this sector provides to economies, issues relating to health and safety of used

clothing among patrons have not been addressed as expected. Medical and environmental experts across continents have raised concerns on possible health risks associated with the handling and use of used clothing. Infectious agents from bacteria and fungi have the potential for spread via clothing, International Scientific Forum on Home Hygiene (2011); likewise respiratory viruses such as rhinovirus, influenza virus and syncytial virus. Neely and Maley (2000) found bacteria like *Staphylococci* and *Enterococci* surviving on articles for extended periods of time. Although, international trade regulations on shipping of used clothing present the need to apply standardized treatments to preserve used clothing before transporting, one cannot be sure of their safety since these products are stored in bales and containers for days before it gets to the market. Therefore, the introduction of infectious organisms into the clothing could be high.

At the market, the product pass through a lot of hands before it reaches the final consumer, it may form important route of transmission of microbial infections. The hands alone may be sufficient cause for transmission of an infection in daily performance of task (Bloomfield *et al*, 2011). Traders open bales of fumigated used clothing at the market sort through and display for clients to select. Clients at some points sort through and try on the product to check for fit without necessarily observing safety measures. Body fluids may be transferred from persons to others as consumers sort through and try on these clothing items before making choices. Again, traders are exposed to long-term effects of vapour from fumigants and other chemicals used to prevent and control infestations on used clothing. Most systematic effects of vapour from fumigants may be neurological: headache, dizziness, vertigo, slurred speech, nausea and vomiting, confusion, blurred vision, twitching and possibly convulsions and coma (Department of Justice and Attorney June 2012 Report cited in Muthiani *et al.*, 2012).

Though used clothing is widely patronized, very little is known about safety measures taken by traders to prevent and control possible health risks associated with the handling of the product. Since these concerns do not translate into sustainable consumer behavior but instead place used clothing retailer at risk a cursory study need to be done to document safety treatment practices used clothing traders observe on the market.

### **Purpose of the Study**

The purpose of the study was to investigate treatment practices and protective measures used clothing traders observe in the handling of the product.

### **Research Questions**

The following research questions guided the study:

1. What kinds of safety treatment practices do used clothing traders observe on the market?
2. What protective measures are adopted by used clothing traders on the market?

## METHODOLOGY

The study adopted the mixed method approach which comprise of both quantitative and qualitative data. The descriptive survey was employed to collect and analyze data. The population for the study consisted of all used clothing traders in the Cape Coast Metropolis. The actual number of the traders could not be retrieved from the Metropolitan Assembly's record due to the disperse nature the traders. Purposive and convenience sampling techniques were adopted to sample ten (10) used clothing traders who deal in multiple used clothing products and were willing to participate in the study. The sample was considered appropriate in order for the researcher gain in-depth understanding of the risk used clothing traders could be exposed to at the market. Data was collected primary through structured interview schedule and observation checklist. Results for the socio-economic characteristics of participants were summarized and presented in one table (Table 1). The qualitative data was analyzed based on themes that emerged from the interview and presented in text and in-text quotes. Data that required quantitative analysis were presented in tables with corresponding frequencies and percentages.

## RESULTS

**Table 1:** Socio-economic characteristics of participants (N=10)

Variable	Frequency	Percentage (%)
<b>Sex</b>		
Female	7	70
Male	3	30
<b>Age</b>		
Below 21	1	10
21-25	2	20
26-30	3	30
31-35	1	10
36-40	1	10
41-45	--	--
46-50	1	10
Above 50	1	10
<b>Level of Education</b>		
Basic/Elementary	4	40
Secondary/Vocational/Technical	6	60
<b>Number of Years Engaged in SHC</b>		
Less than 5	1	10
5-10	5	50
11-16	4	10
17-22	0	00
More than 22	0	00

### **Kinds of Treatment Given to Used Clothing by Traders**

The views of the used clothing traders were sought on the kinds of treatment packages they performed before selling the used clothing. Themes that emerged were identified and corresponding statements were also sampled and presented below:

#### **Sorting into Categories**

All the ten used clothing traders interviewed in this study reported they sort out clothes and other accessories into categories before displaying them. Categorizations was done based on garment type, level of staining, overall appearance and faulty ones. Sample statements from trader 2 and 3 below gives a reflection on basically what the other traders shared:

*“I open up the baled clothes then select them according to type, sizes and use. For example all blouses, skirts, petticoat, etc. are organized into their categories” (Trader 2)*

*“I group the clothes according to quality, those stained, dress type and sometimes sizes.” (Trader 3)*

#### **Stain Removal**

Two participants indicated they pretreat stains in used clothes before displaying them. Trader 1 and 5 expressed their treatment technique to the theme above as:

*“I use water and soap to wash those with stains in them but if the stain is too much I send them to the laundry depending on the type of clothes” (Trader 1).*

*“Normally, I wash all the stained ones with soap to make them look neat for my customers” (Trader 5).*

The rest of the traders found this process as additional work load on them and costly hence felt it was the duty of the consumer to remove stains from the used clothing after acquiring.

#### **Washing or Sponging**

Participant 6 and 4 admitted performing some form of cleaning by washing or sponging depending on the article.

*“I select some special clothes and send them to a commercial laundry called Wise Way Cleaners who do wash them then when they are ready then I go for them. I don’t do the washing by myself.” (Trader 6).*

*“I wash mostly the canvas and other footwear that require washing with water and detergents then I dry them in the sun” (Trader 4).*

#### **Repair/Alteration**

Two participants (Trader 9 and 3) indicated and described how they assess the clothes to identify any faults which help in categorizing and perform the necessary repairs before displaying the clothes.

*“I check on the clothes for any tear, split seam, loose elastic, spoilt zipper, loose and loss buttons. I then fix them by the use of thread and hand needle or my sewing machine. Those that are difficult for me to mend, I sent them to alterationists to repair” (Trader 9).*

*“When I find any of the used clothes torn, I send them to an alterationists who usually move around the market to repair them for me before I display them for sale.” (Trader 3)*

### **Ironing**

Trader 10 and 2 portrayed their commitment to ironing the used clothes before display and shared:

*“I sometimes iron the jackets, shirts and dresses that are crumpled to smoothen and give them beautiful look when I hang them.” (Trader 10).*

*“Usually, I iron those that I want to hang on the hangers and the dummy but the ones displayed on the matted floor I don’t iron.” (Trader 2).*

### **Change style**

One participant shared how she remodels some outmoded styles to give them new look.

*“I select the styles that are out of fashion and redesign them into new styles to make them more appealing to my customers.” (Trader 3).*

### **Kinds of Treatment Practices Observed**

In order to ascertain whether traders observed treatment practices in the handling of used clothing, an observation checklist containing a list of possible treatment activities was followed. The findings were checked, recorded, analyzed and presented in Table 3.

**Table 3: Observed Treatment Practices by Traders before Sale**

<b>Treatment Activity</b>	<b>Frequency</b>	<b>%</b>
Dusting	4	40
Repair/Alteration	3	30
Washing	2	20
Polishing	2	20
Ironing	1	10
Stain removal	1	10

N>10 Due to Multiple Observed Treatment Activities

Results from Table 3 shows traders performed dusting (40%) whilst repair/alteration, washing and polishing recorded 20% in each case. Ironing and removal of stain were observed among two traders.

**Protective Measure Used Clothing Traders Adopted**

The researcher observed traders through the use of observation checklist to check kinds of protective practices traders perform. The results is presented in Table 4.

**Table 4: Protective Measures Observed**

Protective Measures	No. of Traders	%
Use of Apron	6	60.0
Hand Washing	4	30.0
Use of Sanitizers	2	20.0

N>10 Due to Multiple Protective Measures

The results indicates that 6 (60%) used clothing traders wore apron whilst 4 (40%) performed hand washing. Two traders representing 20% were found using hand sanitizers. The study observed that used clothing traders ignored the use of safety items such as glove, nose and mouth mask in the handling of used clothing. Though the wearing of apron was observed but it appeared the intention was for keeping money and not necessarily to ensure safety against possible infestations.

**DISCUSSION**

The trade in used clothing seem to have existed for quite some time in the study area as the result from Table 1 seem to suggest. Significantly, six traders out of the ten have received Secondary/Vocational/Technical education. Age distribution of the participants also indicates that majority of the traders were aged between 21 and 30 years. Mkhize (2003) described the age grouped between 21 and 30 as working age implying that they “consist of different individuals with various income levels; varying needs and actively involved in business transactions”. Both young men and women with different educational and employment histories in Zambia to be engaging in used clothing business (Hansen, 1994).

These findings indicated that that the traders employed varied methods to treat used clothing before sale. Significantly, sorting out of the clothes into categories recorded a higher value indicating that the traders performed this activity often. This finding supports what Slotterback (2007) found as merchants sorted and categorized used clothing by condition. Rivoli (2005) found sorting as a key step in clothing retailing. In addition, few traders mentioned stain removal, alteration, washing, change in style and ironing as basic treatment practices they performed on the used clothing. Apart from sorting out the clothing into categories and dusting, important treatment practices such as washing, repair and pressing were occasionally undertaken by the traders. Forster (2014) outlined washing, stain removal, ironing and pressing, airing, brushing repairing/alteration as key processes in caring for clothes. These practices are believed to aid in preventing or controlling diseases, infections, accidents and embarrassment. Generally, it appeared the traders perform these treatments packages to make the product presentable for sale and not necessarily observe hygienic practices.

Poor treatment and/or untreated used clothing methods ignored by patrons raise a lot of concerns. Muthiani *et al.* (2012), recorded some form of 'left over' microbial infestation after treating some used clothes. Treatment of used clothing are significant to patrons' safety hence, their efficiency and effectiveness need to be reconsidered. Awumah (2012) emphasized "The belief that normal laundering produces clean clothing, does not necessarily translate to bacteriologically clean, due to detergents having a wide range of efficacy in reducing bacteria contamination on clothing". Again, the effectiveness of detergents used and the methods used clothing traders adopted in preventing infestations remain unknown.

Findings from the observation seem to suggest that traders perform some form of treatment to the used clothing before sale. However, basic safety precautions were ignored. Various treatment practices identified and performed by the traders in this study offered job opportunities to repairers/alterationists and laundry service sector. The findings seem to be in line with what Baden and Baber (2005) found on employment in this sector. Though literature suggested that used clothing trade is augmented by tailors, repairers and launderers (Field, 2007; Baden & Barber, 2005; Hansen, 2004) the recording of varied treatment measures used clothing traders adopted remain significant.

It could be observed from the study that the traders ignored safety practices in the handling of used clothing. This was clearly shown as safety items such as use of hand gloves, overall, eye protection devices as well as nose and mouth mask were totally ignored or absent while the wearing of apron was observed though the intention was for keeping money and not necessarily to ensure safety against possible infestations. It appears whatever pre-sale activities the traders carried out was usually meant to either to make the product presentable to buyers but not necessarily to treat any perceived infestations. Meanwhile, these traders stand greater risk of health infestations from fumigated articles as they are the first point of contact when bales are opened. Again, Embil, Dyck, and Plourde (2009) emphasized on the role of the hands in the transmission of infestation.

Ensuring safety in the handling and acquisition is a key factor to be considered. Obviously, the traders were ignorant about possible health hazards relating to skin diseases, respiratory problems, genital infections as well as gastrointestinal infections they are exposed to as a result of handling untreated used clothing. This was clearly shown as safety items such as use of glove, overall as well as nose and mouth mask were totally ignored or absent while the wearing of apron was observed though the intention was for keeping money and not necessarily to ensure safety against possible infestations.

As healthy measures are being ignored by these traders they put themselves at greater risks of being exposed to gases and vapours from fumigants. Fumigant used on clothing such as methyl bromide for instance has been found to be toxic with poor olfactory warning properties which when used on clothing, can cause acute poisoning leaving marked irritation of the eyes, skin and mucous membranes of the respiratory tract on its victims. Again, dermal exposure was found to be a major cause of irritation and corrosive injury of the skin which causes blisters and vessels that



resemble a second-degree burn leading to systematic effects of headache, dizziness, vertigo, slurred speech, nausea, blurred vision and possibly convulsions and coma (Muthiani *et al.*, 2012). The onset of infestations to patrons of used clothing may not be sudden but may be gradual, deteriorating the health of the people. The end result for the infected person will be to spend more to cure diseases acquired through the handling of used clothing or even suffer from long-term treatments of other infections. Eventually, the effect of having a lot of people treating ailments as a result of infections from used clothing affect the production of the country in general. However, the public health and environmental implications of these goods outweigh all other arguments being adduced by patrons.

## CONCLUSION

The study concludes that though used clothing business was providing employment for some individuals in Cape Coast Metropolis, associated health risks were found not to be controlled. Sorting washing, ironing, stain removal, change in style and repairing/alteration were the main treatments done by few traders prior to sale. Used clothing traders seem to be ignorant about the health risks they are exposed to. With a section of the traders not taking effective measures to protect themselves and treat used clothing before sale predict greater health risk and possible infestations cycle hence, the need for public health education.

## Recommendations

The following recommendations have been proposed:

1. The Health and Sanitation Department at the Cape Coast Metropolitan Office should expand their activities to educate used clothing traders in the Metropolis on the dangers associated with the handling and use of untreated used clothing.
2. The Ministry of Health in collaboration with the Health and Sanitation Departments in the Cape Coast Metropolis should develop safety code measures for used clothing traders to adopt.
3. A sensitization programme should be organized by the Directorate of the Cape Coast Metropolis to create awareness on possible risk used clothing traders and patrons may be exposed to.
4. The government of Ghana through the Ministry of Trade and Industry, Ghana Port and Harbour and the Ghana Standards Authority should help regularize the activities within the used clothing business as it has been found to pose health dangers to patrons.
5. Series of case study should be conducted to assess the possibility of infestations with the handling, exposure and consumption of used clothing.

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