INFLUENCE OF MATERNAL SOCIAL CAPITAL ON HEALTH AND WELLBEING OF MOTHERS OF UNDER-FIVE CHILDREN ATTENDING PHCs in IDO LOCAL GOVERNMENT AREA, OYO STATE

BY

DAUDA, DAMILOLA FLORENCE
B.Agric. in Agricultural Extension and Rural Development (IBADAN)
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CERTIFICATION

I hereby certify that this study was carried out by DAUDA DAMILOLA FLORENCE under my supervision in the Department of Health Promotion and Education, Faculty of Public Health, College of Medicine, University of Ibadan, Nigeria.

....

Supervisor

Dr. Yetunde John-Akinola
B.Sc., MPH (Ibadan). PhD (Galway)
Department of Health Promotion and Education
Faculty of Public Health, College of Medicine
University of Ibadan, Ibadan, Nigeria.

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DEDICATION

I dedicate this research work to God Almighty, the God of all grace who saw me through from the beginning to the end of this work, may His name be highly exalted forever more.

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ABSTRACT

Social capital, health and wellbeing studies have focused more on mothers' social capital and child health outcomes in different aspect of health issues but there is a dearth of studies with respect to health and wellbeing of mothers of under-five children. This study investigated the influence of maternal social capital on health and wellbeing of mothers of under-five children attending PHCs in Ido LGA, Oyo State.

This study was a descriptive cross-sectional study. A multistage sampling technique was used to select 385 respondents from 4 PHCs in the LGA. Data collection was done using a semi-structured questionnaire, structural social capital (SSC) was measured with a 21 point scale with categorisation scores of ≤6 as low SSC, 7-13 as average SSC and 14-21 as high SSC. Cognitive social capital (CSC) was measured with a 7 point scale with categorisation scores of ≤3 as low CSC and ≥4-≤7 as high CSC. Overall social capita status (SCS) was measured with a 32 point scale with categorisation scores of ≥15 as low and >15-≤32 as high social capital. Wellbeing was measured with a 64 point scale with scores of ≤21 as low, ≥22-≤42 as average and ≥43 as high. Body Mass Index (BMI) was categorised based on WHO Global data base for BMI. Mid Upper Arm Circumference (MUAC) was categorised with scores <11cm as severe acute malnutrition, 11.1≥12.5 as moderate acute malnutrition, 12.6≥13.5 as at risk of acute malnutrition and 13.6 and above well nourished. Data analysis was done using descriptive and inferential statistics at the significant level of $P < 0.05$.

The mean age of the mothers was 29.9 ± 6.1 and almost all (99.7%) mothers had average level of SSC. More than half (59.7%) had high and 40.3% had low CSC. Overall SCS result show that majority of the mothers (86.2%) had low SCS and only 13.8% had high SCS. Majority (75.6%) had high wellbeing, 22.1% and 2.3% had average and low wellbeing respectively. Less than half (46.0%) of the mothers were of normal weight (18.5-24.9), above a third (39.1%) were overweight (25-29.9). Among the under-five children, 61% were found to be well nourished. Overall social capital was found not to be statistically related to the wellbeing and BMI status but benefits derived from participating in social groups such as: useful health information (p=0.005), child care support (p=0.003) were significantly associated with wellbeing and health status. A linear regression analysis showed an inverse relationship between getting useful health information as benefit derived from participating in networks and wellbeing (OR: -2.1, C.I.: -0.3 - -0.0) and a direct relationship between

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developing friendship and a sense of belonging and wellbeing (OR: 2.204; C.I.: 0.015 – 0.260).

This study revealed that mothers derive more benefit from informal and religious groups indicating that not all social networks have direct benefits for health and wellbeing. Therefore mothers should be encouraged to engage in networks that are of healthful benefits to ensure effective knowledge sharing in sustaining promotion of health and wellbeing among mothers of under-five children.

Key words: Structural social capital, cognitive social capital, wellbeing, health, mothers of under-five children.

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LIST OF ACRONYMS

PHC- Primary Health Care center

LGA- Local Government Area

SSC- Structural Social Capital

CSC- Cognitive Social Capital

SCS- Social Capital Status

MUAC- Mid Upper Arm Circumference

BMI- Body Mass Index

SPSS- Statistical Package for Social Sciences

WHO- World Health organisation

SLT- Social Learning Theory

GDP- Gross Domestic Product

OECD- Organisation for Economic Co-operation and Development

SCI- Social Capital Initiative

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DEFINITION OF TERMS

1. **Mothers of under-five children**: mothers who have children whose children are under the age of five.
2. **Social capital**: this refers to social assets such as friendliness, companionship, affection and social interaction between individuals and families that constitute a social unit.
3. **Structural Social capital:** this is the aspect of Social Capital that expresses the tangible/visible aspect of it, such as: formation and attendance of group meetings, associations and activities.
4. **Cognitive Social Capital:** this is the aspect of Social Capital that refers to the intangible/invisible aspect of it, such as trust and togetherness within groups and communities, reciprocity of help, adherence to norms and so on.
5. **Wellbeing:** wellbeing describes the quality of life of an individual.
6. **Body Mass Index (BMI):** is a person's weight in kilograms divided by the square of height in meters, it is an indicator of either an individual is having a healthy weight or not and likewise it is used to link or diagnose other health problems.

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CHAPTER ONE

INTRODUCTION

1.1 Background to the study

Social capital's implications for health and socio-economic factors has made it a widely studied subject in many research works, there has been a recognition of the relationship between social networks, social support and health in public health research in much earlier times. There was later on an established connection between the concept of social capital and health. (Harpham, Grant and Thomas 2002) Social capital is a means whereby people get access to unavailable information and resources through their involvement and interactions in social networks, interpersonal relationships and other social structures. Social capital is also said to be related with better mental health among mothers and it is considered a mental health promotion strategy among women (Thi and Helen, 2013). Social capital as a concept can be divided into two elements which includes both structural and cognitive elements, social capital's structural elements includes the tangible and easily observed aspects of social capital and they comprise network ties, roles, rules, precedents and procedure, while cognitive social capital relates to intangible dimension of social capital such as dispositions, reflexes, trust and behavioural pattern people exhibit through learning and acting in the society (Tristan, 2018).

In Taga (2013)'s opinion, social capital is a community intelligence gathered through the collective efforts of a society which functions collectively for the solution of the problems and welfare of individuals rather than just a name given to a tangible material. Social capital is a concept that is defined by trust, social norms, network and trustworthiness requisite in groups and communities (Fukuyama, 2002). Though social capital can be defined in many ways as a result of its vast context specific nature, the main idea behind social capital is that its focus is on **social relations** and **networks** that have useful benefits, it is a type of economic and cultural capital which includes social networks as a basic element, transactions are shown by reciprocating kind gestures, trust and cooperation are obvious among members of the society and goods and services are produced not just for personal gains but for a communal good.

Tampubolon (2007), at the poverty and capital conference 2007 discussed social capital and its positive health impact through prevention and provision, he opined that though social

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capital is not the conceptual cure for everything, its absence can lead to inadequate comprehension of important issues such as public health. Optimal health, happy relationships and economic sufficiency are some of the basic needs that add to people's quality of life. Optimum well-being level demonstrate our capacity to deal with difficult situations, to innovate and constructively connect with other people and the world around us, as well as demonstrating a highly effective way of bringing about good outcomes and functioning in many different aspects of our lives. According to Mukaila, Sakaritau, Dauda, Paiko and Zubairu (2012), social capital was described as an empirically exclusive concept that binds community together and positively influences poverty reduction.

Narayan, Chambers, Shah and Petesch. (2000) gave an express explanation of wellbeing as equivalent to high quality of life including material wellbeing that is often described as being physically adequate. Wellbeing also includes being physically powerful, being mentally alert and good looking. Social wellbeing includes child care, sense of worth, having good relationship, peace and security in the family and community and having confidence and hope about the future, having freedom to make choices and taking actions that could be of assistance to community members. Wellbeing can be viewed subjectively or objectively: Subjective well-being explains a person's experience of good feelings, having a sense of individual energy, engaging in activities which are significant and which creates feelings of competence and self-sufficiency, it also explains a need for adequate supply of inner wealth to help manage situations when it goes wrong and be resilient to changes beyond immediate control. On the other hand objective wellbeing reflects from a person's capability to achieve different functioning from the opportunities available to him, that is the capability of a person to harness resources and opportunities around him and converting them into a wealthy and healthy living.

According to Anita, Marija and Josipa (2014) explained that social wellbeing is characterised as a mutual benefit to society resulting in economic development (the objective dimension of wellbeing) and the resulting positive view of individuals of the quality of life in the society, (the subjective dimension of wellbeing). Wellbeing is measured with indicators; like income, health and education which are the most commonly used. Housing, autonomy, access to the mass media and recreation, empowerment, involvement and good nutrition are other indicators used to access wellbeing.

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According to the World Happiness Report (2015), social capital was said to increase wellbeing through intrinsic benefits and instrumental benefits. The benefits of social capital referred to as intrinsic signify the human longing for love, friendship and community. Social capital indicates the extent to which interpersonal relationships involving trust, honesty and mutual support increase the level of mental and physical wellbeing. The instrumental benefits of social capital crop up from its contributions to improved economic performance and social insurance.

Yusuf (2008), reveals the impact of social capital on household welfare, in his opinion, strengthening local institutions through the active involvement of the poor in project planning, design and implementation of projects is a critical strategy for poverty reduction in Nigeria, thus group formation is now seen as an important requirement for the vulnerable to take advantage of some of the initiatives of poverty reduction initiated by the state which will lead to better health outcomes.

1.2 Statement of research problem

UNICEF (2018) report identifies Low economic status, poor maternal nutrition and inadequate prenatal care as some of the challenges faced by mothers of under-five children in tackling nutritional challenges among small children. UNICEF (2018) reported that Nigeria's 40 million women of childbearing age suffer a disproportionally high level of health issues surrounding birth.

Mothers are faced with a wide range of challenges which are peculiar to each and every mother because motherhood creates new experiences that necessitates a work towards a balanced life which when not attended to can impair their health and wellbeing and consequently the health of their children. For some of women, motherhood is associated with suffering, ill health and even death especially when social support is lacking, WHO (2019).

Some of the challenges faced by mothers are mostly social capital related and they include challenges such as emotional disturbance, social isolation and risk of developing depressive illnesses especially among young mothers which can be associated with feelings of isolation, loneliness and low self-esteem (Mental Health Foundation, 2013) as a result of their inability to pull resources from social networks. Many mothers face challenges of teaching and nurturing their children alone during their formative years and still having to cater for the economic needs of the family, many mothers bear the burden of bringing up their children by

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themselves because their husbands abandoned them. Meanwhile social ties are fast eroding between and within communities leaving the poor communities poorer, (wol.jw.org, 2020).

This study aimed at investigating the social capital status of mothers of under-five children in two dimensions (structural and cognitive) with indicators such as social networks, trust, togetherness, cohesiveness, participation and membership in groups among mothers of under-five, and how they result in improved health and wellbeing in the selected study area.

1.3 Justification of the Study

A lot of developmental science research has gone into clinical control of under-five mortality and morbidity and the impact of mothers on their children but not many research has been found on what might best help mothers and care givers to function well themselves. (Luthar, Ciciolla, 2015)

Most of the few studies found (Harpham *et al.*, 2006; Sujarwoto & Tambubolon, 2011) have also focused on mothers' social capital and child health outcomes without looking at the corresponding health and wellbeing of the mothers. In filling this gap in literature, this study assessed the relationship between social capital and health and wellbeing of mothers of under-five children.

Also, this study contributes to the increasing body of knowledge of social capital and its associations with positive health outcomes. The outcome of the study will guide the decision of the government and policy makers in public health sector in strengthening the existing social capital facilities in communities so as to improve health and wellbeing of mothers of under-five children.

1.4 Research questions

This study looked into the connectedness of social capital, health and wellbeing status of the mothers of under-five and their children and the following questions will be answered:

1. What is the level of social capital in terms of structural and cognitive social capital of the mothers of under-five children?
2. What are the social networks the mothers of under-five are involved in?
3. What benefits do the mothers of under-five derive from being members of thesocial networks?
4. What is the health and wellbeing status of the mothers of under-five

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1.5 Objectives of the study

1.5.1 Broad objective

The general objective of the study was to determine the influence of social capital on health and wellbeing among mothers of under-five in Ido Local Government Area of Oyo State, Nigeria.

1.5.2 Specific objectives of the study are to:

1. Determine the social capital (Structural and cognitive) status of the mothers of under-five children
2. Identify the types of social networks the mothers of under-five are involved in.
3. Determine the benefits derived from participation in social networks
4. Determine the health and wellbeing status of mothers of under-five children.

1.6 Hypotheses of the Study

1. There is no significant relationship between selected socio-demographic characteristics and health status among under-five mothers in the study area.

2. There is no significant relationship between social capital and the level of wellbeing and health status among under-five mothers and their children in the study area

3. There is no significant relationship between benefit derived from participation in social groups and the level of wellbeing and health status among under-five mothers

1.7 Study Variables

Independent variables

- mothers of under-five children's socio-demographic characteristics

Dependent variables

- Wellbeing
- Health

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CHAPTER TWO

LITERATURE REVIEW

2.1 Concept of Social Capital

Exploring social capital as a concept, one of the initial pioneers is Lyda Judson Hanifan, who argued that social capital refers to real social assets such as friendliness, companionship, affection and social interaction between individuals and families that constitute a social unit. Other pioneers are Jane Jacobs, Pierre Bourdieu and Jean-Claude Passeron and Glenn Loury. Much later, Robert Putnam and James Coleman were credited with bringing the term "social capital" to the limelight.

Robert Putman (1993) is said to have given the lowest level breakdown of social capital even though in earlier writings there were distinct traces of the term. He defined social capital as a set of horizontal associations among people living in the same community which fosters unity for the community's mutual benefit. Putman describes social capital in his seminal book on civil associations in Italy as those social organizational features such as individual or household structures, and the associated tradition and values that generate social cost for the society as a whole'. Social capital in its simplest explanation refers to an individual or community's worth in terms of social connectedness, ties, shared norms and values that allows them to access social benefits

Coleman gave the concept of social capital an expanded meaning by including the vertical relationships which have to do with hierarchical structure of a community/society and the uneven power distribution. A third and wider concept of social capital evolved and included formalized institutional relationships and institutions such as government, the political regime, rule of law, and the system of justice.

Grootaert (1997) explains social capital as the missing link, acknowledging natural capital, created and physical capital and human capital are together part of the wealth of nations and the basis for economic development and growth.

Based on the researcher's discipline, social capital has various definitions as a concept that cuts across all disciplines. While Coleman (1988) defines social capital as people's ability to work in togetherness among groups, Fukuyama prefers to define the concept more broadly by

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referring to it as “any instance in which people collaborate for a common good based on shared information and common values”. According to Putnam (1993), social capital talks about the features of a social organization, such as trust, norms and networks that can improve the effectiveness and efficiency of the society by enabling collective cohesive actions. According to Durkin (2000), social capital is referred to as those characteristics of interpersonal relationships that make room for individuals/household’s access to social resources which raises household utility and consumption level. Portes (1998) argues that social capital enhances the capacity of individuals to obtain benefits by engaging in social networks. Woolcook and Narayan (2000) also defined social capital as the norms and networks which allows for collective action between members of the society; and thus they identified the possible link between social capital and economic development. The concept of social capital therefore requires trust, socially acceptable standards, networks and trustworthiness between members of groups and the society that help facilitate transactions, lower transaction cost, lower knowledge cost and collective resources management (Fukuyama, 2002).

2.1.1 The three views of social capital

The simplest concept of social capital was given by Putman (Putman 1995; Putman and others 1993). He defined it as a collection of horizontal connections between individuals in a community/group: social capital consists of networks in the society ("civic engagement netwoks") and related norms that can improve community’s efficiency. This definition is underpinned by two empirical presumptions (networks and norm), and they have important economic consequences. James Coleman (1990) by expanding the scope of observation and adding the vertical aspect of social capital, expatiated and provided a broader view of social capital. He describes social capital as a number of organizations consisting of certain elements of the social structure, and promoting such acts by individuals or corporate actors within the system that indirectly recognises relationships between groups rather than individuals. This definition expands the concept of social capital to include vertical as well as horizontal associations and behaviour within and among other structures such as firms. Vertical associations are characterized by hierarchical relationships and an unequal power distribution among members (Grooteart and Bastelaer 2001). The third and most detailed view of social capital encompasses the social and political system that transforms social structure and makes it possible to establish norms. Apart from the mostly informal, frequently

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territorial, horizontal and hierarchical relationships of the first two explanations of social capital, this third interpretation incorporates the most formalised institutional ties and framework at macro-level, such as the political regime, the rule of law, the court system, and civil and political freedom. This emphasis on institutions builds on the work of Douglass North (1990) and Mancur Olson (1982), who argued that such institutions had a vital impact on economic development rate and trend.

Looking critically at the work of some key players in defining social capital as a concept:

James Coleman introduces social capital as a tool for better understanding of societal collective action. Coleman discusses how social capital is created and examines three different forms in which it is manifested. Using data from a previous study on high school students, he then illustrates how social capital is used in the creation of human capital by demonstrating its effect in the family and in the community on the educational development of youth. Coleman declared that social capital is defined by its purpose. He does not see social capital as a solitary body, but a variety of different parts put together with two elements in common: first are certain social structure features; and secondly, the creation of a cohesive force for certain actions to be carried out by members within the social structure. He emphasized on two important types of social structures needed in enabling the various forms of social capital. Togetherness in the social network is one very important point which ensures that all actors are connected such that certain protocols are required to be kept by its members. The second is an organization created for one purpose but utilized for another. Coleman explains this as "an appropriable social organization". According to Coleman, social capital can be classified into three forms; the first he described as the obligations and expectations which rely totally on the trustworthiness of the social environment. The rotating-credit associations of Southeast Asia created by groups of friends and neighbours were used as an explanatory model for the importance of trust. Secondly social capital was described as the effective information flow in the entire social structure so as to provide a basis for action. The third type is the presence of norms that is a socially acceptable way of life with it associated sanctions.

Fukuyama (1995) in his book titled: 'trust: the social values and the creation of prosperity' built on other scholars' work especially James Coleman's; he argues that the degree of trust in a given society that determines its prosperity and degree of democracy as well as its ability to compete. He measured social capital using trust and the resources that are accumulated through norms of reciprocity and successful collaboration within networks of civic engagement. He then focused on defining culture, trust in respect to social capital while

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emphasising how trust is related to the industrial structure and the source of organizations that are important to competitiveness and economic well-being. According to Him, in some country case studies, to obtain economic success it is expedient to establish large, democratic, and capitalistic organizations, especially corporations.

Research has strongly linked social capital (trust and networks) with desirable policy outcomes. Therefore, social capital is described as social relationship or interactions that can lead to improved well-being and assistance to government efforts in improving the well-being of rural household. Previous work on social capital carried out among mothers with disabled children (Zebrack *et al.* 2004, Shapiro 1989) revealed that mothers who participated in social networks and who had a considerable level of social support had predicted and appreciable health and quality of life.

2.1.2 Measurement of social capital

There has been an increase in the recognition of social determinant of health, and social capital is fast becoming a very important concept in international health research. In a cross sectional ecologic study on social capital, income inequality and mortality, Kawachi *et al.* (1997) measured social capital by these parameters.

- Inter-personal trust,
- And perceived norms of reciprocity, and
- Per capital membership in voluntary group.

Social capital can be very difficult to measure directly because of its diverse definitions. Therefore, the use of indicators is crucial for experimental/empirical purposes. Three types of proxy indicators can be used to measure social capital as described by Grooteart and Basterlaer (2002). These are:

- Membership in local associations and networks which are indicators of trust and adherence to norms and an indicator of collective action, membership in local associations and network being the most commonly used proxy but it only measures the structural form of social capital but there is a need to include the
- Measures of attitudes
- And subjective measures captured by measures of trust and collective action to have a more comprehensive measure of social capital.

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The above three indicators according to them measures social capital from different vantage point and provide a helpful framework for designing a measurement instrument.

The Organization for Economic Co-operation and Development (OECD) statistics Directorate completed a project funded by the European Commission came up with four basic methods to measure social capital after a comprehensive review of indices for measurement of social capital. They include:

- personal relationship,
- social networks,
- civic engagement,
- Trust volunteering, political participation, group membership, different forms of community action.

In a study carried out in Nigeria by Okunmadewa *et al.* (2005), six dimension of group participation were studied, these are:

- membership index (percentage of members of household belonging to local level institutions),
- meeting attendance index,
- decision making index,
- heterogeneity index,
- cash contribution and
- labour contribution.

According to Okunmadewa *et al.* 2005 and Yusuf, 2008, the three most important dimensions are density of association, internal heterogeneity and active participation in decision making.

Social capital initiative, SCI focuses on three types of proxy indicators:

- membership in local associations and networks,
- indicators of trust and adherence to norms, and
- an indicator of collective action.

Cote and Healy (2001) suggested that measurement of social capital can be more comprehensive in their scope of key dimension such as network, values and norms and that there should be a balance between the attitudinal/subjective and the behavioural. Measure

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should also accommodate cultural specificity and other community characteristics (Robinson 1997).

Several studies on social capital have also indicated that recognizing relevant indicators is the usual practice. Trust has been used in many studies as a means of approximating levels social capital. Trust is forged with specific people through common participation in groups, association and activities. However, when this trust goes beyond the trust of specific individuals to generalised trust, it is said to be extraordinarily valuable because it improves social interaction and gets things accomplished. (Putman 1993, 2001) Halpern (1999) suggests that there is a need for a simple "quick and dirty" measure which can be solved in the systematic measuring of social trust. Using trust and adherence to norms as a measure of social capital is based on individual's beliefs about their relationships with others. Questions are often asked about the level of trust in other people and major institutions, respondent's expectations about trust and experiences with behaviour requiring trust (Grootaert 1999; Putman 1999)

Collective action has been used in several studies as an indicator of social capital. The provision of many services requires collective action by a group of individuals. The extent to which this collective action occurs can be measured and is an indicator of underlying social cohesion. Question are asked on how likely some people in the community would get together to help if something unfortunate happened to someone in the neighbourhood, such as a serious illness, or the death of a family member

2.2 Concept of Health and Wellbeing

Health is a concept that defines man's state of physical, mental, social and spiritual wellbeing. The World Health Organisation (WHO) defines health as a state of complete physical, mental, social wellbeing and not merely the absence of disease or infirmity (WHO, 1948) and later in 1986 Ottawa Canada, it was furthered explained that health is a resource for everyday life and not an 'object for living'. The WHO associates health with wellbeing clearly and view health as a human right requiring both physical and social resources to achieve and maintain. Huber *et al*. (2011) gave a new definition of health as 'the ability to adapt and self-manage which is important for survival'. Health can be categorised as physical health and mental health, physical health refers to optimal bodily functions due to lack of diseases which is mostly based on regular exercise, balanced nutrition and adequate rest. Mental health refers to a person's emotional, social and psychological wellbeing, it is

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not just the absence of depression, anxiety or any mental disorder but it also describes an individual's ability to enjoy life, be resilient after difficult experiences, acclimatize to hardship, gain potential, feel safe and secure and achieve balance and stability.

Well-being can be likened to people's feelings and their functioning, both on a personal and a social level, and how they evaluate their lives in general. To break this down, people's feelings refers to emotions such as happiness or anxiety and how people function refers to things such as their sense of competence or their sense of being connected to those around them. How people evaluate their life in general is captured in their satisfaction with their lives, or how they rate their lives in comparison with the best possible life they know.

Stiglitz *et al. (*2009). Based their argument on wellbeing being a multi-dimensional concept on the following key dimensions: material living standards which include income and consumption, personal activities including livelihoods, health, education, political influence and governance, social connections and relationships, environment (present and future conditions) and uncertainty (economic and physical nature).

People's interaction with their immediate environment and the world at large describes the dynamic nature of wellbeing. Optimum level of well-being indicates people's capacity to respond to difficult conditions, to come up with constructive ideas and to work helpfully with other people and the world around them. The well-being of a society can be defined as a collective societal advantage, implying accomplishment of adequate economic development (the objective dimension of well-being) and the resulting positive perception of people towards the proper stage in the society, i.e. the quality of life (the subjective dimension of well-being), thus when it comes to quantification and evaluation of the well-being of a society, it is necessary to measure and use objective and subjective indicators. (Anita *et al*., 2014).

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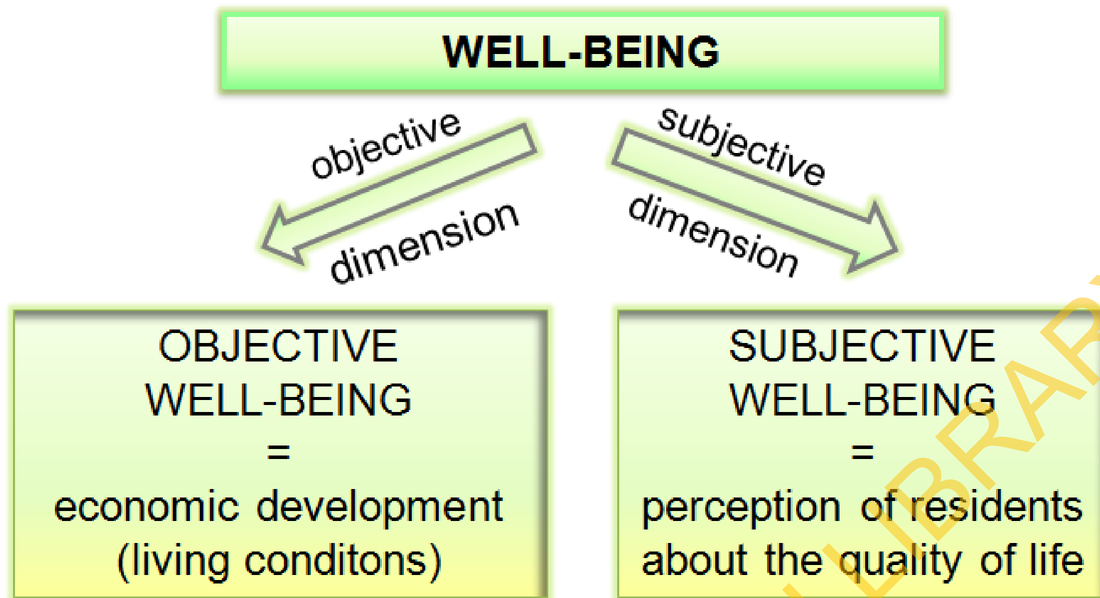

Figure 2.1: Dimensions of well-being (Anita *et al.*, 2014)

In other words, the well-being of a society can be explained as a combination of an outcome and the function of actual living conditions (objective well-being) and the community's reaction to them, meaning that the effects of the living conditions in the community on individuals depend on the individual's perception of them, what they take and what consequences their action involve (subjective well-being). This approach of well-being observation is justified since even residents of rich countries enjoying the benefits of the economic growth do not reveal greater overall well-being. The reasons for that can be found in the existence of the two dimensions described above.

2.3 Social Capital, Wellbeing and Health Relationship

The relationship between social capital and health has been long described in various researches. Few of them are: Kawachi *et al.* 1999, Kawachi 1999, Hawe and Shiell 2000 and Louhner *et al*. They demonstrated how various components of social capital which includes trust, reciprocity and membership in organisations give a valid explanation to life expectancy, infant mortality, heart disease and self rated health to a large extent (Kawachi *et al*. 1997). Some of the psychological factors that are fundamental to social capital as identified by David R. Thomas (2000) are as follows: Social cohesion and trust, Perceived efficacy and sense of belonging, Community identity and sense of community.

Social capital was also described as a mediating factor between and within communities having a positive influence on health inequalities as a result of social isolation, low level of

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support and low self confidence. Strong networks, good level of support and positive relationships have proved to increase individual's sense of connectedness and belonging, confidence and self esteem and ability to bring about change in one's life or in their community which serves as a protective factor in relation to health.

Helliwel (2001) opined that an in-depth study of the level and growth rate of GDP per capita of a nation and other factors reveal the implications of social capital for well-being. He further stressed that it requires that we make some careful consideration about the measurement of welfare, and then make some theoretical and empirical connections. He also evaluated some of the associating factors of social capital and health outcomes, because healthy living and longevity are part of the measures adopted in evaluating well-being. From Helliwel's review, four types of social capital was recognised which were: marriage, interactions among close friends and family, church membership and informal and formal group participation of which individuals with higher level of social ties had lower mortality rates, it also predicted not just mortality rates but also reduction in the rate of occurrence of diseases such as ischemic heart disease, cancer, circular disease, respiratory diseases, accidents and suicide.

From Putnam (2000) surveys of some researches, he reported that there is a proven evidence of improved health outcomes in communities with elevated levels of social capital, even after putting a check for vital constant variables. There are also rising proof that showed that local relationships, associations and networks have a positive impact on grass root development and the general well-being of households. Research in India have been able to show that social capital increased the poor's ability to distribute resources effectively and increased their resilience to difficult circumstances (Townsend (1994).

It is also been reported that women who are actively engaged in community based developmental activities or programmes could achieve self-empowerment via increase in: knowledge, useful life skills, self-esteem, and sense of belonging in the community.

Almedon (2005) assessed 12 empirical articles regarding social capital and mental health related outcomes among youth and children, adults including mothers, and older adults and discovered that social capital indicators such as: social and neighborhood cohesion, trust, and relationships among family members are among the factors that contribute to lower mental health challenges.

The creation of social networks directly affects wellbeing due to the fact that those who are strongly entrenched in social networks tend to express more satisfaction and happiness with their lives than those who have fewer contacts with members of the society. High level of

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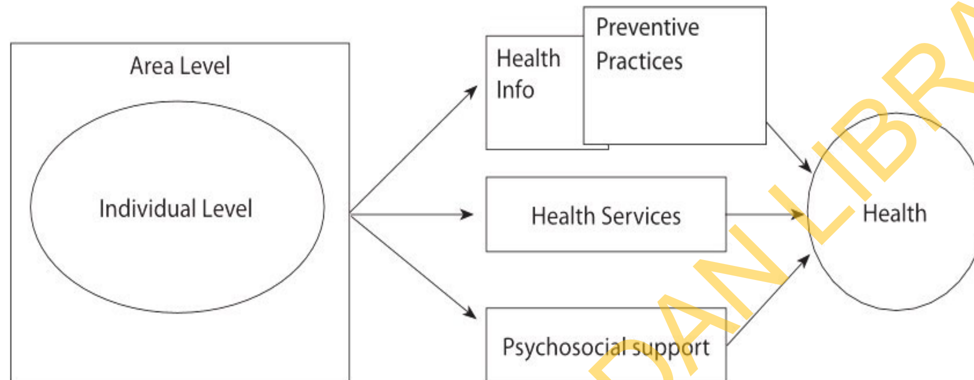
trust is generated, connection with different groups in the society, increase efficiency and declines in transaction cost are all gotten through social networks also with the fact that group participation as a form of social capital has been recognised as means through which rural communities can improve their welfare (Amudavi, 2005; Okunmadewa *et al.*, 2005& Yusuf, 2008). Lin (2001) concludes that the access to social capital can make individual better off in terms of wealth, wellbeing and power.



Source: Adapted from Scheffler and Brown (2008).

Figure 2.2: Diagram showing relationship between social capital and health

2.4 Maternal Social Capital and Child Health

According to Hapham *et al.* (2006), in the Young Live maternal social capital and child wellbeing comparative study, it was hypothesized that social capital can contribute to child well-being in various ways which include: Social connections which enable mothers learn more through the transfer and sharing of knowledge (e.g. the right age for child immunization types), think, perceive and respond to situations in various ways due to attitudinal changes (e.g. valuing education of the girl child and prompt visit to a health centre due to signs of illnesses in children). It also enables mothers to have positive feelings due to increase in the level of emotional supports which arise from social interactions and is positively associated with good maternal psychological and social health, thus contributing to improved child health. The study revealed that high levels of social support and cognitive social capital were the most consistent in association with good child health which include better nutritional and physical health outcome. The association between mothers' social capital and child health was stronger for infants and their mothers due to greater contact when compared with mothers with mothers with their eight year olds who have lesser contact.

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Kawachi and Berkman (2001) gave two explanatory models for establishing the relationship between social capital and health. One of which is referred to as a 'buffering model'. This model explains that social capital protects against or decreases the effects of detrimental occurrence (e.g. negative life events). And the other was referred to as the 'main effect model' which he explained that high social capital results in being exposed to positive ways of life which positively affects wellbeing.

They also described mediums through which social capital at the community level influences health: First that social capital aids the creation of knowledge distribution and health information disseminating channels, explaining that health promoting information could be disseminated more quickly via social network channels of which such channels are especially needed in the developing countries. Second, they explained social capital as a system that can be used for the sustainability of healthy behavioural norms (e.g. regular physical exercise, healthy eating habits) and ensuring a collective social power over harmful health behaviours (e.g. smoking and drinking). Third, social capital was said to create opportunity for the promotion of increased access to services and social amenities. Access to developmental and health related services are better accessed by strongly organized communities who are well able to mobilize community cohesive action toward achieving a common goal. Fourth, social capital is an agent for the development of social support systems and mutual love and respect for members in a community/group which are embedded in psycho-social processes in a community. They are said to translate into improved child nurturing, easier self development and continuity of a healthy social community.

In addition, The Marmot review (2010) stated that social capital also enables communities to respond positively to the national and local initiatives, including those from health organisations.

Domingo, Barba, Talavera, Tolentino and Rodesa (2017), studied the association between maternal social capital and nutritional status of children between ages 6 and 24 months. It was discovered from their study that a significant association exists between maternal social capital and nutritional status of children age 6 to 24 months old. This implies that an increase in the level of maternal social capital resulted in the advancement in the nutritional status of the children and vice versa.

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2.5 Social Capital and Maternal health and wellbeing

Improving women's health is essential for all nations and not just a basic human right because women's health affects that of their family members and the community at large. Social capital being a social determinant of health which addresses health inequality issues, improves health by providing avenues for more suitable access to informative resources through which members of the society can benefit from and thereby promoting decision making relating to health and exacting some influence on societal norms. It also increases the utilisation of health services, provides access to health services and provides psychological support. Studies have revealed the various benefits of social capital on different aspects of population's health and wellbeing particularly on women of reproductive age, it is widely seen as a significant element of public health promotion and a dependable forecaster of health, happiness and overall life satisfaction. (Azam, Fatemah, Eesa & Mostafa, 2014).

Previous work on social capital carried out among mothers with disabled children (Zebrack *et al.* 2004, Shapiro 1989) revealed that mothers who participated in social networks and who had a considerable level of social support had predicted and appreciable health and quality of life. Also showing that: greater wellbeing especially life satisfaction and health were related to greater social network size, social activities and satisfaction with network; depression was highly related to low level of social support and physical health and improvement over time were as a result of initial level of social support gotten. These made the mothers with high level of social capital assertive and expressive and equally confident about their actions making remarkable impacts in their lives and that of their families. Mothers who do not participate experienced depressions, isolations, feelings of being overwhelmed and confusions.

Sara, Andrew, Olga, Tanya, Calson and Ikka (2016) reached a conclusion that social capital is mixed blessing for women when recognising that social relations can lead to different health outcomes both positive and negative, illustrating that some forms of social capital can be difficult to maintain for mental health. Family was recognised as a form of social capital that improves women's mental health.

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2.6.1 Conceptual Framework for the Study

The conceptual framework for this study is the Social Learning Theory. The SLT was theorized by Albert Bandura in 1963. This theory describes the interactions that exist among personal factors, environmental factors, and human behaviour and how these factors influence each other. It also stresses on the importance of observing and modelling the behaviours, attitudes and emotional reactions of others.

Social Learning Theory aims at establishing the fact that individuals can learn in multiple ways from their immediate environment. Even though individuals make choices based on self reflection, the environment in which an individual finds himself or herself is a major determinant of their actions and learning.

The framework was used to assess the various groups and networks that Mothers of under-five children are exposed to in their environment, what value (benefits) they expect from their social networks their ability to learn from them which could influence their health and wellbeing. The SLT has 6 components: Environment, Person, Behaviour, Observational learning, Value expectation and self efficacy.

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2.6.2 The Social Learning Theory (SLT) and its application to the study.

Environment: this includes the neighbourhood mothers live in, the social groups and networks they engaged in and the collectiveness among the community/group members. This component of the SLT guided the questions on the groups mothers belong to in the community and neighbourhood they live in. The environment indicates the social atmosphere available to mothers to be able to accrue capital resources to them. The group were informal groups, political groups, cooperative groups, religious groups and women groups on section B questions 9 to 15.

Behaviour: this component was used to explain the characteristics of people living in the environment as a result of interactions with the environment, this theory explains that environment which includes groups and relationship within and without a community has an influence on a person's behaviour and practice. This means that if groups and interpersonal relationships within the community are functional, it could facilitate knowledge sharing and rendering social support that could have positive effect on their health and wellbeing. This behaviour could be in form of improved health seeking behaviour, improved healthful practices and lifestyle and general wellbeing. Section C, anthropometric measures of mothers and child indicates the result of their behaviour.

Person: this refers to the Mothers of under-five children and their community/group members

Observational learning: this refers to learning and changes taking place as a result of interactions and relationship within the community and groups mothers they belong to. This could be in form of childcare support, knowledge sharing on healthy nutrition and improvements in economic activities.

Value expectation: this refers to the benefits that are expected to be derived from participating in social groups. Mothers need to perceive a desirable benefit before they are willing to participate in groups and trust people in the neighbourhood. Benefits such as improved income, emotional support and other social support benefits that would improve their health and wellbeing are some of the value expectation that could result from a person characteristics influenced by the environment. Section B questions 32 to 43 and section c questions 44 to 64 answers to this component.

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Self efficacy: this indicates the capability of the mothers to socialise with others in their community and this could be due to their cognitive social capital, which is the ability to trust and get along well with group/community members. Section B questions 18 to 24 answers to this component.

Social Learning Theory framework

Using the Social Learning Theory SLT, a framework was developed for the study:

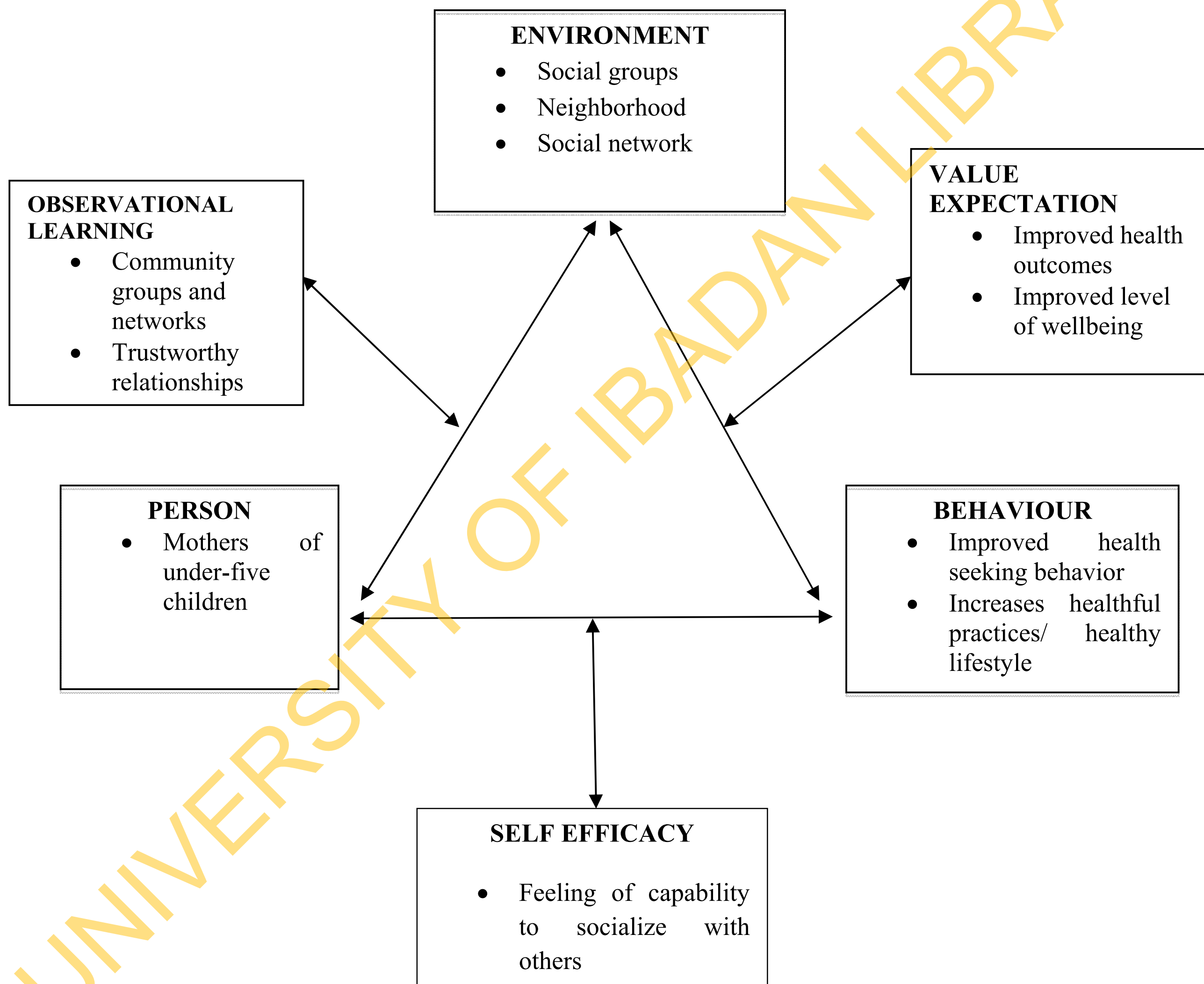

Figure 2.3: Application of Social Learning Theory to investigate the various social networks, benefits derived from participating and its influence on health and wellbeing among Mothers of under-five children in Ido LGA, Ibadan.

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CHAPTER THREE

METHODOLOGY

3.1 Study Area

The study was conducted in selected primary health care centers in Ido Local Government Area (LGA), Ibadan, Oyo State, South-west Nigeria. The LGA was carved out of Akinyele Local Government by the Buhari/Idiagbon regime and it was created in the year 1989 with the administrative headquarters at Ido. It has 10 wards. The LGA shares boundary with Iseyin and Afijio LGA to the North, Akinyele LGA to the East, Ibarapa LGA to the West and also sharing boundary with Ogun state.

The LGA has a landmass area of 1,010.954 square kilometres and a population of 103,261 according to the last National Population Census in 2006 and as at 2010, the population was estimated to be 117,129 using a growth rate of 3.2%. The residents of the LGA are mostly farmers, traders, transporters and civil servant and there are Yorubas and other tribes from different parts of the country resident in the LGA.

3.2 Study Design

A descriptive cross-sectional study design was used for this study to investigate the influence of social capital on the health and wellbeing of mothers of under-five. The instrument that was employed for data collection was a semi-structured interviewer-administered questionnaire which assessed the social capital status, health and wellbeing status of the mothers of under-five children.

3.3 Study Population

The study population are mothers of under-five children paired with their under-five child, they were randomly selected from 4 PHCs in the Local Government Area.

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3.4 Sample Size determination

The sample size was calculated with the assumption that the proportion of involvement in social capital is 50%. Thus the sample size was calculated using the following formula

$$n = \frac{z^2pq}{d^2}$$

where n= Sample size

d = degree of accuracy, 5%

z = confidence level, 1.96

p = reasonable estimate of key proportion, 50% or 0.05

q = 100-50 = 50 or 0.50

$$n = \frac{1.96^2 x 0.50 x 0.50}{0.05^2}$$

= 384.96

385 Mothers of under-five children alongside their under-five children were enrolled for the study.

3.5 Sampling Technique

For the purpose of this study, a three stage sampling technique was employed in selecting Mothers of under-five children from LGA selected PHCs

First stage: 11 PHCs were identified in the LGA

Second Stage: a purposive selection of 4 Primary Health Care Facilities (Ido PHC, Apete PHC, Gbekuba PHC and Ologuneru PHC) was done based on their location in the LGA and population at immunization days.

Third Stage: by random selection, consenting mothers were selected from each health facility in the following proportion: 50 percent (193) of the total population was taken from Apete PHC, 30 (116) percent was taken from Ido PHC, 15 (57) percent was taken from Ologuneru PHC and 5 (19) percent was taken from Gbekuba PHC.

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Table 3.1: Distribution of respondents in the four PHCs

Name of PHC	Freq	Percentage (%)
Apete PHC	193	50
Ido PHC	116	30
Ologuneru PHC	57	15
Gbekuba PHC	19	5
Total	**385**	**100**

3.6 Inclusion Criteria

Mothers who have at least one under-five child and who gave consent to participate in the study were selected to participate in the study.

3.7 Exclusion Criteria

Mothers who do not have children under-five years of age were excluded from participating in the study. Mothers who do not also consent to participate in the study were excluded.

3.8 Instrument of Data collection

To measure the independent variable which was maternal social capital, the Short Adapted Social Capital Assessment Tool (SASCAT) developed by Harpham *et al.* (2006) was adapted for the study and it was used to measure both structural and cognitive aspect of social capital.

The dependent variable which was the Health and Wellbeing among mothers of under-five children was measured adapting the Warwick Edinburgh Mental Health Scale (WEMWBS) as the measure for subjective wellbeing

To further ascertain their health status, anthropometry measures of the mothers of under-five children was measured using height and weight for BMI which served as index for mother's nutritional status, and the Mid Upper Arm Circumference (MUAC) of under-five children was checked to ascertain their nutritional health. The MUAC was measured using the tailor's tape in place of the MUAC tape which was not readily available.

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3.9 Method of Data collection

For the study, quantitative method was used for data collection with the use of a serially numbered self-administered questionnaire. The data was collected with the assistance of research assistants who were trained prior to the time of data collection. The research assistants were at the hospital when the mothers of under-five came with their children to the hospital for immunisation, they were approached and informed about what the research study is about and the informed consent form was read out and consent was gotten before data was collected. Anthropometric measures were taken after the questionnaires were administered.

3.9.1 Validity of Instrument

In order to establish validity of the instruments, validity of the instrument was ensured by reviewing relevant literatures and consulting my supervisor was who gave a review and provided a valid template of how the instrument should be, she also edited and made useful corrections and suggestions before the actual administration of the questionnaire to the study participant.

3.9.2 Reliability of instrument

In establishing the reliability of the instrument, a Pre-test technique was applied. The Pre-test technique process was such that the constructed questionnaire was administered to 10% of the total study population (40 Mothers of under five children) in another representative population but the completed questionnaire for the pre-test was not be used in the final analysis of the work. The pre-test of this study was carried out among mothers of under-five children in Ojo PHC in Akinyele LGA. A Cronbach Alpha measurement and reliability co-efficient measure was carried out on the pre-tested questionnaires to know how reliable the instrument was. A co-efficient of 0.649 Cronbach's Alpha was gotten. The questionnaire was further adjusted for better output for the main study.

3.9.3 Data analysis and Management

Serial numbers was written on the copies of the questionnaires for easy identification, entry and recall. A coding guide was developed along with the data collection tool in order to facilitate its analysis. The questionnaires were also reviewed to ensure consistency and completeness. Cleaning, recording and coding of data for analysis was also done. Using the coding guide, the data collected was carefully entered into the Statistical Package for Social

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Science (SPSS IBM version 22) statistical software and analysed using descriptive statistics such as mean, median and mode and inferential statistics such as Chi-square and logistic regression.

Structural social capital (SSC) was measured with questions on attendance and level of participation in social groups, a 21 point scale was used with scores <6 were categorised as low SSC, 7-13 categorised as average SSC and 14-21 categorised as high SSC. The cognitive social capital (CSC) was measured using questions on trust and togetherness with a 7 point scale with scores ≤ 3 were categorised as low CSC and $4\geq 7$ categorised as high CSC. Overall social capita status (SCS) was measured with a 32 point scale with categorisation scores of ≥ 15 as low and $15\geq 32$ as high social capital. Wellbeing was measured with a 64 point scale with ≤ 21 categorised as low, $22\geq 42$ categorised as average and ≥ 43 categorised as high and BMI was categorised based on WHO Global data base for BMI. The data was analysed using descriptive and inferential statistics at the significant level of $P < 0.05$.
Mean, percentage, standard deviation and frequency distribution was used as the descriptive statistics to present the summary of data collected on the field. Inferential statistics was used to analyse the statistics for the study.

3.9.4 Ethical consideration

Ethical approval (Ref. No: AD 13/479/1448) was sought and obtained from the Oyo State Ministry of Health Research Ethics Committee before going to the field for data collection. A written informed consent was attached to the questionnaire. To ensure confidentiality of research participants, identifiers such as names and other information that can reveal the identity of research participants were not included in the research instruments. The nature of the study, benefits and objectives was explained to the respondents and they were assured that the information given would be treated with utmost confidentiality and that it was only for research purpose. Respondents were also intimated about the opportunity to withdraw their consent freely at any point during the study. Confidentiality of each participant was maximally maintained during and after the collection of their information. Information gathered from the respondents was stored in the computer for analysis while copies of the filled instruments will be kept for maximum safety.

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3.9.5 Informed Consent

The purpose of the research was adequately communicated to the research participants and management of the PHCs. Every individual participant gave verbal consent prior to enrolment for the study. They were informed that they have full rights to withdraw from the research at any stage of the study.

3.9.6 Confidentiality

Data that was gotten from this study was used for the purpose of the research only and it was kept confidential on a password protected computer. Mothers and their under-five children were assured of confidentiality and there was no form of identifiers on the questionnaire.

3.9.7 Risk and Inducement

There was no risk associated with this research. Likewise there was no fee paid to research participants for participating in the study

3.9.8 Study Limitation

During the data collection process, there were challenges faced in assessing the mothers on the immunization days due to the activities carried out in the PHC and most of them were in a hurry to meet up with their commercial activities but I was able to pacify them of the importance of the study for health promotion. There was also a limitation in time and resources available for the study so only four PHCs were selected to effectively collect the data along with assistant from research assistants.

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CHAPTER FOUR

RESULTS

4.1: Respondents' Socio-demographic characteristics

Table 4.1 shows the socio-demographic characteristics of the mothers of under-five children. Majority (60%) were between the ages 21 to 30 year, 31.2% were between 31 to 40 years of age and 4.7% were below 20 years of age. Most of the mothers (97.9%) were married. As regards religion, Christians were 52.5%, Muslims were 47% and very few (0.5%) were of the Traditional religion. Majority (91.9%) of mothers were Yorubas while Igbos were 4.7%, Hausas were 0.3% and other ethnic group were 3.1%. In terms of education, 50.4% of the mothers had only secondary level education, 39.7% had tertiary education, 7.3% had only primary education and 2.6% had no formal education. The predominant occupation as shown by the result were traders (41.0%) and artisans (31.4%). Majority of the mothers (53.2%) earned between N11,000 - N30,000 every month, 27% earned below N10,000 and 19.5% earned above N31,000. Majority (59.5%) had 1-2 children, many (35.6%) had 3-4 children, 4.7% had 5-6 children and only 0.3% had 7-8 children.

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Table 4.1: Respondents' Socio-demographic characteristics (N=385)

Characteristics	Frequency	Percentage (%)
Age		
<20	18	4.7
21 – 30	231	60
31 – 40	120	31.2
41 – 50	13	3.4
>50	3	0.8
Marital Status		
Single	8	2.1
Married	377	97.9
Religion		
Christianity	202	52.5
Islam	181	47
Traditional	2	0.5
Ethnicity		
Yoruba	354	91.9
Igbo	18	4.7
Hausa	1	0.3
Others	12	3.1
Highest level of Education		
No formal education	10	2.6
Primary	28	7.3
Secondary	194	50.4
Tertiary	153	39.7
Occupation		
Civil servant	12	3.1
Artisan	121	31.4
Professional	18	4.7
Trader	158	41.0
Teachers	44	11.4
Farmers	7	1.8
Students	17	4.4
Cleric	1	0.3
Unemployed	7	1.8
Average income per month (N)		
0 – 10000	105	27.3
11 – 30000	205	53.2
31000 and above	75	19.5
Number of Children		
1-2	229	59.5
3-4	137	35.6
5-6	18	4.7
7-8	1	0.3

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4.2: Social Group Participation

Table 4.2a shows the distribution of respondent's participation in social groups. Majority (86.5%) did not participate in cooperative group and only 13.2% participated, Majority (86.8%) do not participate in women's group and only (13.2%) of the mothers do participate. Most of the mothers (85.5%) do not participate in market groups and only (14.5%) of the mothers participate in market group, Most (95.6%) of the mothers do not participate in political group while only a few (4.4%) of the mothers participate in political group, many (62.5%) do not participate in religious group while 37.4% participate in religious groups, a large percentage(83.1%) do not participate in informal groups while 16.9% do and only 2.6% of the mothers participate in other groups.

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Table 4.2: Respondent's Social group participation (N=385)

	Participation			
	Yes		No	
	Freq.	%	Freq.	%
Cooperative group	52	13.5	333	86.5
Women's group	51	13.2	334	86.8
Market group	56	14.5	329	85.5
Political group	17	4.4	368	95.6
Religious group	144	37.4	241	62.6
Informal group	65	16.9	320	83.1
Others	10	2.6	375	97.4

***Variables are all dichotomous variables**

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4.2.1: Level of participation

The result showed that majority of the mothers (92.3%) who participated in cooperative group are ordinary members while 1.7% are committee members and 0.5% are executive members. Of the mothers that participate in women's group, 74.5% were ordinary members, 13.7% are committee members and 11.76 are executive members. Most of the mothers (94.6%) participating in market group are ordinary members while 1.8% are committee members and 3.6% are executive members. Most of the mothers (94.1%) participating in political group are ordinary members while 5.9% are committee members. Many of the mothers (72.9%) participating in religious group are ordinary members, 13.9 are committee members and 13.2 are executive members. Most of the mothers (95.4%) participating in informal group are committee members and 1.5% are executive members. Most of the mothers(70%) who participate in other groups are ordinary members while 20 of them are committee members and 10% are executives.

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4.2.1: Respondent's level of participation in social group (N=385)

Respondents groups	Level of Participation					
	Ordinary member		Committee member		Executive member	
	Freq.	%	Freq.	%	Freq.	%
Cooperative group	48	92.3	3	1.7	1	0.5
Women's group	38	74.5	7	13.7	6	11.76
Markey group	53	94.6	1	1.8	2	3.6
Political group	16	94.1	1	5.9	0	0.0
Religious group	105	72.9	20	13.9	19	13.2
Informal group	62	95.4	1	1.5	0	0.0
Other group	7	70	2	20	1	10

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4.2.2: Source of Social Support

Table 4.3c shows the various sources of social support mothers of under-five children derive social support from. Family and friends (44.4%) was the most common source of social support among these women, followed by religious groups (38.4%). Charity organisation (5.5%) was the least source of social support among these mothers, other sources were: cooperative group (10.6%), community leaders (11.2%), Government (11.2%) and others (1.3%).

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Table 4.2.2: Source of Social Support (N=385)

Source of Social Support	Yes		No	
	Freq.	%	Freq.	%
Cooperative Group	41	10.6	344	89.4
Community Leaders	43	11.2	342	88.8
Charity Organization	21	5.5	364	94.5
Family and Friends	171	44.4	214	55.6
Religious group	148	38.4	237	61.6
Government	43	11.2	342	88.8
Others	5	1.3	380	98.7

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4.2.3: Types of social support gotten from social networks

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Table 4.2.3 shows the result of the types of social support gotten from social networks. Financial support is common to all social networks, majority (90.6.%) of the mothers received financial support from their family and friends, 1.2% received moral support, 0.6% received spiritual support, 3.5% received advice, 1.2% received gifts and 2.9% received health care support from family and friends. Of the proportion of mothers that received social support from religious leaders, 75.7% of the mothers received financial support, 5.4% received moral support, 12.2% received spiritual support, 2.7% received advice, 0.7% received gifts, 1.4% were visited and 2.0% received healthcare support. Mother who participated in cooperative group, 97.6% received financial support. From community leaders, 76.7% received financial support. Form charity organisation, 76.7% also received financial support. From the government the proportion of mothers that received social support, 67.4% received financial support and 18.6% received healthcare support.

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Table 4.2.3: Types of social support gotten from social networks (N=385)

Sources of social support	Types of social support	Freq.	%
Cooperative	Financial support	40	97.6
	Moral support	1	2.4
Community Leaders	Financial support	33	76.7
	Moral support	5	11.6

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	Spiritual support	1	2.3
	Advice	2	4.7
	Gifts	2	4.7
Charity organization	Financial support	16	76.2
	Moral support	1	4.8
	Spiritual support	1	4.8
	Advice	1	4.8
	Gift	1	4.8
	Health care	1	4.8
Family and friends	Financial support	155	90.6
	Moral support	2	1.2
	Spiritual support	1	0.6
	Advice	6	3.5
	Gift	2	1.2
	Health care	5	2.9
Religious leaders	Financial support	112	75.7
	Moral support	8	5.4
	Spiritual support	18	12.2
	Advice	4	2.7
	Gifts	1	0.7
	Visitation	2	1.4
	Healthcare	3	2.0
Government	Financial support	29	67.4
	Spiritual support	2	4.7
	Advice	2	4.7
	Gift	2	4.7
	Healthcare	8	18.6
Other sources	Financial support	5	100

4.2.4: Respondent's response to benefit derived from participating in social networks.

As regards benefits derived from participating in social networks, majority of the mothers (64.7%) got the benefit of useful health information and 35.3% did not. Most mothers (65.2%) also benefitted as regards childcare support and 34.5% did not. Many (57.7 %) of the mothers received the benefit of having easy access to health facility through their social networks. Majority (70.4%) did not get the benefit of easy access to health care finance while only 29.6% did. Majority (70.9%) did not get financial and material support while 29. 1% did get. Most (83.4%) of the mothers did not get easy access to loan but 16.6% did get. Most (73.5%) did not get to develop friendship and a sense of belonging from participation in

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social networks while 26.5% did. Many (63.6) did not get the benefit of security in the neighbourhood but 36.4% did get it. Majority (76.4%) did not get to be involved in decision making while 23.6% did. Majority (78.2%) did not get satisfaction from involvement in developmental activities while 21.8% did. Many (58.2%) did not get invited to social function from participating in social networks while 41.8% did. Majority did not get other benefits from participating in social networks but a few (3.4) did.

Table 4.2.4: Benefits derived from participation in social network (N=385)

	Yes		No	
	Freq.	**%**	**Freq.**	**%**
Useful health information	249	64.7	138	35.3
Childcare support	251	65.2	134	34.8
Easy access to health facility	222	57.7	163	42.3
Access to health care finance	114	29.6	271	70.4
Financial and material support	112	29.1	273	70.9
Easy access to loan	64	16.6	321	83.4
Friendship and developing a sense of belonging among group members	102	26.5	283	73.5
Security in the neighbourhood	140	36.4	245	63.6

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Involvement in decision making	91	23.6	294	76.4
Satisfaction from involving in developmental activities	84	21.8	301	78.2
Invitation to social function	161	41.8	224	58.2
Other benefits	13	3.4	372	96.6

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4.2.5: Source of benefit derived from participating in social network

Table 4.3b shows the various sources of benefits derived from mothers' participation in social networks:

The mothers who got useful health information from the hospital were 37.9%, 11.7% got theirs from the radio, 10.4% got theirs from the radio, 10.4% got theirs from others sources not mentioned, 1.8% got theirs from friends, 0.5% got theirs from religious homes, 0.8% got theirs from their mother-in-law.

The mothers who got child care support from the hospital were 51.4%, 0.8% got child care support from their mother-in-law, 0.3 get theirs from religious homes, 5.5 get theirs from the radio, 2.9% get theirs from their family, 0.5% get theirs from their friends, 3.9% get theirs from others sources not mentioned.

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The mothers who had easy access to health facility through the hospital were 52.5%, 1.0% get theirs through the radio, 1.0% also get theirs through their family, 3.1% get theirs through other sources not mentioned.

The mothers who got health care financial support from their families were 20%, 2.9% get theirs from their friends, 0.5% get theirs from religious homes, 0.5% get theirs from the Radio, 0.3% get theirs from their mother-in-law, 2.9% get theirs from the hospital.

Mothers who got financial and material support from their families were 24.7%, 0.5% gets theirs from their friends, 0.8% gets theirs from the hospital, 0.5% gets theirs from religious homes, 2.6% gets theirs from sources not mentioned.

Mothers who got access to loan from their families were 9.4% , 3.6% get access to loan from religious homes, 0.5% get access to loan from the hospital, 0.5% gets theirs from friends,2.6% gets theirs from other sources.

Mothers who got to develop a sense of belonging and friendship among friends were 13.2% get, 8.6% also get theirs from their families, 3.9% gets theirs from religious homes, 0.8% gets theirs from other sources.

Mothers who got security in their neighbourhood through vigilante group were 22.6%, the ones who got security from community were 12.7%, the ones who got security from Landlord association were 0.8% and 0.3% got security from others source not mentioned.

Mothers who got the benefit from involvement in decision making in the family were 22.6%, 0.3% was through religious groups, 0.3% from friends and 0.5% from other groups not mentioned.

Mothers who got satisfaction in involving in developmental activities in the family were 17.9%, 1.3% of the mothers got satisfaction in developmental activities involvement among friends and 2.6% were involved in developmental activities through other groups.

Mothers who got invitation to social function from their community were 25.15%, others sources where they got invitation to social function were through: Religious groups (1.3%), Landlord association (0.5), friends (12.5) and other groups not mentioned (1%)

Other benefits derived from participating in social networks were sourced from family (1.8%) and friends (1.6%).

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Table 4.2.5a: Source of benefit derived from participating in social network (N=385)

	Freq.	%
Source of useful health information		
Hospital	146	37.9
Mother in law	3	.8
Religious home	2	.5
Radio	45	11.7
Family	6	1.6
Friends	7	1.8
Others	40	10.4
No response	136	35.3
Source of childcare support		
Hospital	198	51.4
Mother in law	3	.8
Religious home	1	.3
Radio	21	5.5
Family	11	2.9
Friends	2	.5
Others	15	3.9
No response	134	34.8
Source of easy access to health facility		
Hospital	202	52.5
Radio	4	1.0
Family	4	1.0
Others	12	3.1
No response	103	42.3
Source of health care finance support		
Hospital	11	2.9
Mother in law	1	0.3
Religious home	2	0.5

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Radio	2	0.5
Family	79	20.5
Friends	11	2.9

Table 4.2.5b: Source of benefit derived from participating in social network (N=385)

Others	8	2.1
No response	271	70.4
Source financial and material support		
Hospital	3	0.8
Religious group	2	0.5
Family	75	24.7
Friends	2	0.5
Others	10	2.6
No response	273	70.9
Source of easy access to loan		
Hospital	2	0.5
Religious group	14	3.6
Family	36	9.4
Friends	2	0.5
Others	10	2.6
No response	321	83.4
Source of friendship and developing a sense of belonging		
Religious group	15	3.9
Family	33	8.6
Friends	51	13.2
Others	3	0.8
No response	283	73.5
Source of security benefit in the neighbourhood		
Vigilante group	87	22.6
Community	49	12.7
Landlord association	3	0.8
Others	1	0.3
No response	245	63.6
Source of benefit of involvement in decision making		

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Religious group	1	0.3
Family	87	22.6
Friends	1	0.3

Table 4.2.5c: Source of benefit derived from participating in social network (N=385)

Others	2	0.5
No response	294	76.4
Source of satisfaction in involving in developmental activities		
Family	69	17.9
Friends	5	1.3
Others	10	2.6
No response	301	78.2
Source benefit of invitation to social function		
Community	102	25.15
Religious group	5	1.3
Landlord association	2	0.5
Friends	48	12.5
Others	4	1.0
No response	224	58.2
Other sources of benefit derived from participating in social networks		
Family	7	1.8
Friends	6	1.6
No response	372	96.6

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4.2.6: Respondent's Cognitive Social Capital

The mothers that agreed that they trusted people in their neighbourhood were 41%, 41.6% likewise disagreed that they trust people I n their neighbourhood while 11.4% of the mothers were undecided. 37.4% mothers agreed that majority of the people living in their community could be trusted, 39.5% disagreed while 23.1% were undecided about it. 63.1% mothers feels they are part of their community while 20.5% of the mothers did not feel they were part of their community and 10.4% were undecided about it. 54.5% agreed that they will talk to a local authority or government about problems in their community if any is found, 25.5% disagrees and 20% were undecided about it. 65.7% of the mothers get along well with people in their community, 17.9% do not and 16.4% were undecided about it. 63.9% of the mothers agreed that majority of the people in their community generally get along well with each other, 18.7% disagreed while yet 17.4% were undecided.

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Table 4.2.6: Respondent's Cognitive Social Capital (N=385)

	Agree		Undecided		Disagree	
	Freq.	%	Freq.	%	Freq.	%
I trust people in my neighbourhood	158	41	67	17.4	160	41.6
Majority of the people in my community can be trusted	144	37.4	89	23.1	152	39.5
I feel I am part of my community	243	63.1	63	16.4	79	20.5
I will talk to a local authority or government about problems in my community if any	210	54.5	77	20	98	25.5
I get along well with people in my community	253	65.7	63	16.4	69	17.9
Majority of people living in my community generally get along well	246	63.9	67	17.4	72	18.7
I think that the majority of people in this community would try to take advantage of me if any get the chance to	158	41	104	27	123	31.9

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4.3: Wellbeing of respondents

Table 4.4 shows the responses gotten from the wellbeing questions. 73.2% often times are optimistic about the future20.3% sometimes are and 6.5% do not all feel optimistic about the future. 74% often times feel useful while 23.3% sometimes feel useful and 3.6% do not at all feel useful. 4.4% of the women do not feel relaxed while 29% sometimes feel relaxed and 66.5% often times feel relaxed. 59% have often times been feeling interested in other people, 33.5% sometimes feel interested in other people while 7.5% do not at all feel interested in other people. 52.7% often times have been dealing well with their problems sometimes have been dealing well with their problems. 64.4% have been thinking clearly often times, 30.6% have been thinking clearly sometimes and 4.9% have not at all been thinking clearly. 66.2% have been feeling confident often times, 28.6% have been feeling confident sometimes while 5.2% have not felt confident at all. 67.5% have been feeling loved often times, 27.0% have been feeling loved sometimes while 5.5% have not at all felt loved. 28.1% are not at all satisfied with their income level, 30.6% sometimes are while 41.3% are often times satisfied with their income level. 70.4% are often time interested in more income generating activity, 20.5% sometimes are while 9.1% only are not at all in need of more income generating activities.56.1% can often times afford to get their basic need, 32.2% sometimes are while only 11.7% can not at all afford their basic need from the work they do.

Figure 4.2 shows that 72% of the respondents were high level of wellbeing that is a good level of wellbeing, 22.1% had average level of wellbeing and only 2.3% had low level of wellbeing. A three point likert scale was used with rarely (1), Sometimes (2) and often times (3) with the aggregate score of 126, scores below 21 were labelled low level of wellbeing, scores 22 – 42 was labelled average level of wellbeing and scores 43 – 63 was labelled high level of wellbeing. (WEMWBS, 2006)

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Table 4.3: Wellbeing of respondents **(N=385)**

	Not at all		**Sometimes**		**Often times**	
	Freq.	**%**	**Freq.**	**%**	**Freq.**	**%**
I've been feeling optimistic about the future	25	6.5	78	20.3	282	73.2
I've been feeling useful	14	3.6	86	22.3	285	74.0
I've been feeling relaxed	17	4.4	112	29.1	256	66.5
I've been feeling interested in other people	33	7.5	129	33.5	227	59.0
I've been dealing with problems well	22	5.7	160	41.6	203	52.7
I've been thinking clearly	19	4.9	118	30.6	248	64.4
I've been feeling good about myself	17	4.4	109	28.3	259	67.3
I've been feeling confident	20	5.2	110	28.6	255	66.2
I've been able to make up my own mind about things	21	5.5	122	31.7	242	62.9
I've been feeling loved	21	5.5	104	27.0	260	67.5
I've been interested in new things	25	6.5	93	24.2	267	69.4
I've been feeling cheerful	24	6.2	102	26.5	259	67.3
My income level is satisfactory	108	28.1	118	30.6	159	41.3
I need more income generating activity to improve my income level	35	9.1	79	20.5	271	70.4
I am dealing with my business challenges well	91	23.6	126	32.7	168	43.6
I have savings to fall to in hard times	90	23.4	102	26.5	193	50.1
I need to borrow money to make ends meet	136	35.3	128	33.2	121	31.4
I can afford to get my basic needs from the work I do	45	11.7	124	32.2	216	56.1
My business gives me joy and satisfaction	32	8.3	97	25.2	256	66.5
My business gives me less stress	64	16.6	107	27.8	214	55.6

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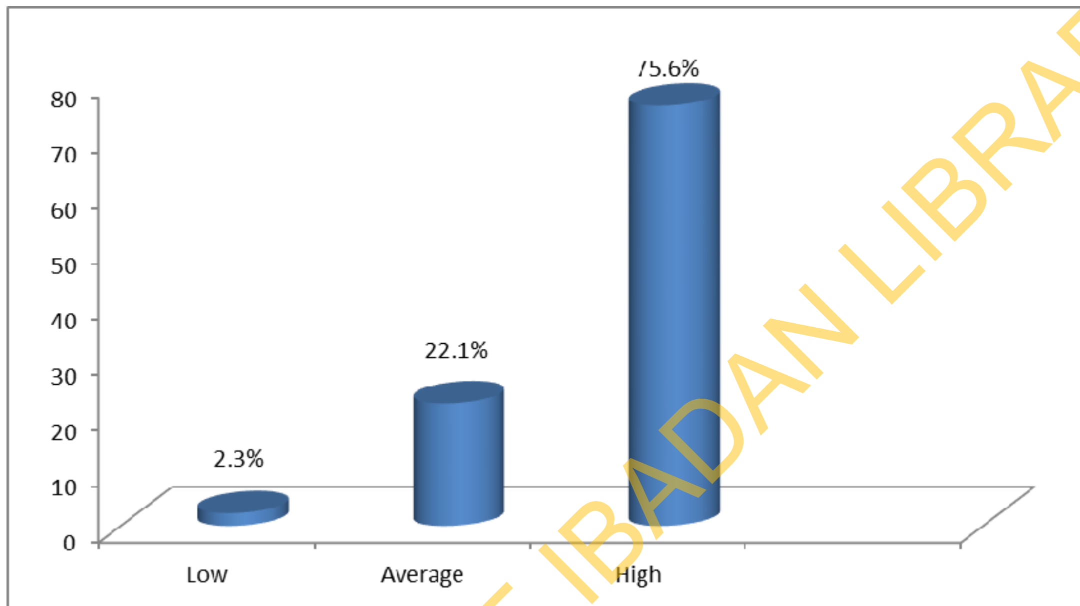

Figure 4.2: Respondents' Wellbeing status.

***Warwick Edinburgh Mental Wellbeing Scale (WEMWBS)**

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4.4: Body Mass Index (BMI) status among Mothers of Under five.

Table 4.5 shows the BMI status of the respondents. Majority of the mothers (46.5%) were of normal weight, very few 2.7% were under weight, 11.8% were obese, and many (39.1%) were over-weight.

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Table 4.4: Body Mass Index (BMI) status among Mothers of Under five. (N=385)

	Freq.	%
Under-weight	9	2.7
Normal weight	158	46.5
Over-weight	133	39.1
Obese	40	11.8

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4.5: Mid Upper Arm Circumference (MUAC) of under-five children

Table 4.6 shows the distribution of the under-five children Mid-upper arm circumference measurements gotten. Many (61.4%) of the children were well nourished with the measure of 13.6cm and above. For MUAC measure of 12.6cm to 13.5cm, 19.5% were at risk of acute malnutrition. For MUAC measure of 11.1cm to 12.5cm, 16.1% had moderate acute malnutrition and only 3% had severe acute malnutrition with MUAC measure 11cm and lesser.

MUAC categorisation

- **MUAC less than 110mm (11.0cm) indicates severe acute malnutrition**
- **MUAC of between 110mm (11.0cm) indicates moderate acute malnutrition**
- **MUAC of between 125mm (12.5cm) and 135mm(13.5cm) indicates that the child is at risk of acute malnutrition**
- **MUAC over 135mm (13.5cm) indicates that the child is well nourished.**

Sourced from <u>http://motherchildnutrition.org/early-malnutrition-detection/detection-referral-children-with-acute-malutrition/interpretation-of-muac-indicates.html</u>

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Table 4. 5: Mid Upper Arm Circumference (MUAC) of under-five children

	Freq.	%
<11 cm	9	3.0
11.1 – 12.5	48	16.1
12.6 – 13.5	58	19.5
13.6 – above	183	61.4

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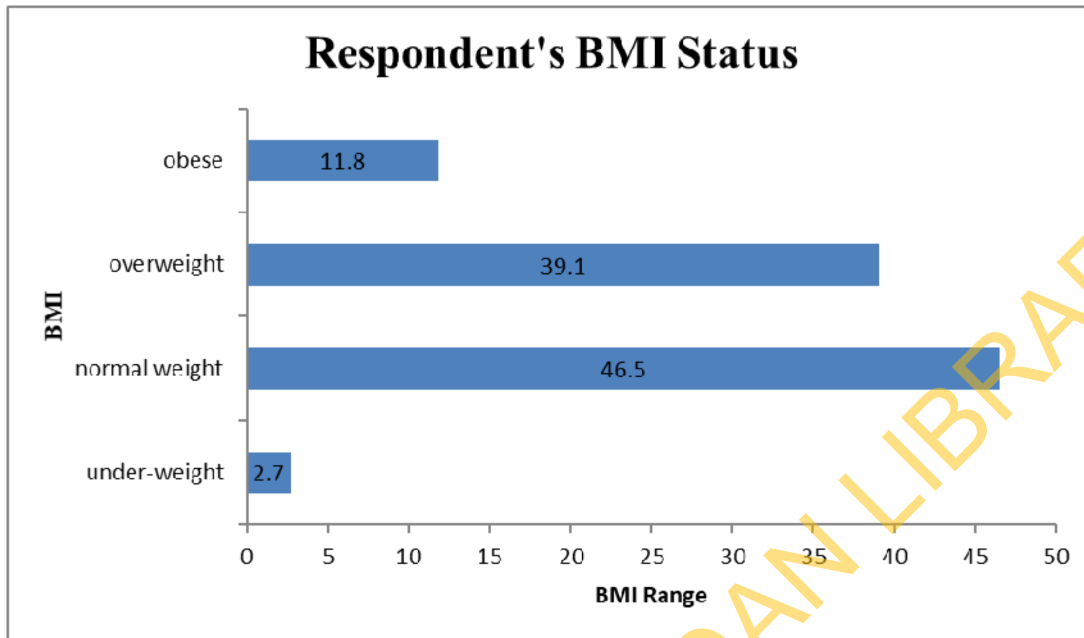

Figure 4.3: Respondents' Health Status using BMI

***BMI categorisation sourced from WHO, 2020. Global Database on Body Mass Index**

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Hypotheses Testing

4.6: Hypothesis 1: There is no significant relationship between selected socio-demographic characteristics and health status among mothers of under-five children in the study area.

Table 4.7 presents the result of the cross tabulation between respondents socio-demographic characteristics and their health status.

Fisher's exact analysis was used to show the relationship between the socio-demographic characteristics and health status of the respondents. There was a statistical significant relationship between health status and religion (X^2: 12.232; p-value: 0.01). Other socio-demographic variables showed no statistical relationship with health status. Therefore we reject the null hypothesis on the association between religion as a socio-demographic variable and the health status of mothers of under five children in the study area.

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Table 4.6a: Association between respondents' socio-demographic characteristics and health status using BMI.

Respondent's socio-demographic characteristics	Under-weight Freq. (%)	Normal weight Freq. (%)	Over-weight Freq. (%)	Obese Freq. (%)	X²	P-value
Age						
< 20	2(14.3)	9(64.3)	3(21.4)	0(0.0)		
21-30	6(2.9)	104(50.5)	74(35.9)	22(10.7)	19.168	0.51
31-40	1(1.0)	40(38.5)	47(45.2)	16(15.4)		
41-50	0(0.0)	5(38.5)	6(46.2)	2(15.4)		
Greater than 50						
Marital status						
Single	0(0.0)	3(60.0)	2(40.0)	0(0.0)	0.921	1.00
Married	9(2.7)	155(46.3)	131(39.1)	40(11.9)		
Religion						
Islam	2(1.3)	88(56.4)	54(34.6)	12(7.7)		
Christianity	7(3.8)	70(38.5)	77(42.3)	28(15.4)	16.856	0.007*
Traditional	0(0.0)	0(0.0)	2(100.0)	0(0.0)		
Ethnicity						
Yoruba	9(2.9)	146(46.9)	117(37.6)	39(12.5)		
Igbo	0(0.0)	6(37.5)	10(62.5)	0(0.0)	8.152	0.598
Hausa	0(0.0)	1(100.0)	0(0.0)	0(0.0)		
Others	0(0.0)	5(41.7)	6(50.0)	1(8.3)		
Highest level of education						
No formal education	0(0.0)	3(36.4)	5(45.5)	2(18.2)		
Primary	4(3.7)	56(52.3)	38(35.5)	9(8.4)	8.206	0.738
Secondary	5(2.9)	88(51.5)	63(36.8)	15(8.8)		
Tertiary	3(2.3)	53(39.6)	57(42.5)	21(15.7)		

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Table 4.6b: Association between respondents' socio-demographic characteristics and health status using BMI.

Occupation						
Civil servant	0(0.0)	3(36.4)	5(45.5)	2(18.2)		
Artisan	4(3.7)	56(52.3)	38(35.5)	9(8.4)		
Professional	0(0.0)	6(37.5)	8(50.0)	2(12.5)		
Unemployed	0(0.0)	4(66.7)	1(16.7)	1(16.7)		
Trader	3(2.2)	55(40.4)	62(45.6)	16(11.8)	23.801	0.427
Student	2(12.5)	9(56.2)	4(25.0)	1(6.2)		
Teachers	0(0.0)	18(45.0)	14(35.0)	8(20.0)		
Farmers	0(0.0)	18(45.0)	14(35.0)	8(20.0)		
Cleric	0(0.0)	1(100.0)	0(0.0)	0(0.0)		
Average income per month						
k0-10,000	5(5.4)	48(51.6)	27(29.0)	13(14.0)		
11,000-30,000	3(1.6)	84(45.9)	77(42.1)	19(10.4)	8.509	0.189
31,000-above	1(1.6)	26(40.6)	29(45.3)	8(12.5)		
Number of children						
1-2	9(4.4)	101(49.8)	76(37.4)	17(8.4)		
3-4	0(0.0)	50(41.3)	50(41.3)	21(17.4)	19.909	0.331
5-6	0(0.0)	7(46.7)	6(40.0)	2(13.3)		
7-8	0(0.0)	0(0.0)	1(50.0)	1(50.0)		

*Fisher exact analysis

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4.7 Hypothesis 2: There is no significant relationship between social capital and the level of wellbeing status among mothers of under five children in the study area.

Fisher's exact analysis was used to show the relationship between respondents' social capital status and their level of wellbeing. Social capital status had no statistical relationship with the wellbeing status of the respondent having p-value > 0.05. Therefore we do not reject the null hypothesis on the association between social capital and wellbeing.

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Table 4.7: Relationship between respondents' social capital status and the level of wellbeing.

	Low Social Capital Freq. (%)	High Social Capital Freq. (%)	X^2	p-value
Wellbeing status				
Low	9(2.3)	0(0.0)	2.061	0.315
Average	70(18.2)	15(3.9)		
High	253(65.7)	38(9.9)		

*Fishers exact analysis

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4.8 Hypothesis 3: There is no significant relationship between benefit derived from participation in social group and health status of mothers of under five children in the study area.

Table 4.9 shows the result from the cross tabulation between benefits derived from social group participation and health status of the respondents. The result indicates that there a significant relationship between benefits: Useful health information (X^2=19.496; p=0.000), Childcare support (X^2=15.277; p=0.002), easy access to health facilities (X^2=15.171; p=0.002), Satisfaction from involvement in developmental activities (X^2=9.220; 0.024) and health status using BMI.

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Table 4.8a: Relationship between benefits derived from social groups and health status.

		Under weight Freq. (%)	Normal weight Freq. (%)	Overweight Freq. (%)	Obese Freq. (%)	X^2	P-value
Useful health information							
	Yes	4(1.8)	124(54.6)	75(33.0)	24(10.6)	19.496	0.000*
	No	5(4.4)	34(30.1)	58(51.3)	16(14.2)		
Child care support							
	Yes	4(1.8)	121(53.8)	77(34.2)	23(10.2)	15.277	0.002*
	No	5(4.3)	37(32.3)	56(48.7)	17(14.8)		
Access to health facility							
	Yes	5(2.4)	111(54.1)	73(35.6)	16(7.8)	15.171	0.001*
	No	4(3.0)	47(34.8)	60(44.4)	24(17.8)		
Health care finance							
	Yes	3(2.9)	49(47.6)	37(35.9)	14(13.6)	1.052	0.802
	No	6(2.5)	109(46.0)	96(40.5)	26(11.0)		
Financial and Material support							
	Yes	4(4.1)	43(43.9)	37(37.8)	14(14.3)	2.280	0.508
	No	5(2.1)	115(47.5)	96(40.5)	26(10.7)		
Access to loan							
	Yes	2(3.6)	32(58.2)	14(25.5)	7(12.7)	5.830	0.101
	No	7(2.5)	126(44.2)	119(41.8)	33(11.6)		
Friendship and developing a sense of belonging							
	Yes	4(4.5)	43(48.9)	27(30.7)	14(15.9)	5.851	0.110
	No	5(2.0)	115(45.6)	106(42.1)	26(10.3)		

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Table 4.8b: Relationship between benefits derived from social groups and health status.

Security							
	Yes	2(1.7)	55(46.6)	40(33.9)	21(17.8)	7.107	0.650
	No	7(3.2)	103(46.4)	93(41.9)	19(8.6)		
Decision making							
	Yes	1(1.3)	32(42.1)	27(35.5)	16(21.1)	7.557	0.048*
	No	8(3.0)	115(43.4)	114(43.0)	28(10.6)		
Involvement in developmental activities							
	Yes	3(2.1)	71(49.7)	50(35.)	19(13.3)	2.395	0.500
	No	6(3.0)	87(44.2)	83(42.1)	21(10.7)		
Invitation to Social function							
	Yes	0(0.0)	4(30.8)	6(46.2)	3(23.1)	2.607	0.391
	No	9(2.8)	154(47.1)	127(38.8)	37(11.3)		

*Fisher exact (Significant values with p-value less than 0.05)

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4.8.1: Linear regression analysis on relationship between benefits derived from social groups and health status.

Linear regression analysis was used to present the result of relationship between benefits derived from social group participation and health status using BMI.

The result shows that easy access to health facilities and security in the neighbourhood was significantly related to BMI.

Mothers who got easy access to health facilities as a benefit derived from social group participation were 2.692 more likely to have a healthy weight than mothers who do not. (OR: 2.692; CI: 0.075-0.480)

The regression analysis shows an inverse relationship between neighbourhood security and health status using BMI, which means that mothers who had security in their neighbourhood as a benefit derived from participating in social networks are 2.084 more likely to have a decreased healthy weight than mothers who do not. (OR: -2.084; CI: -0.358 - -0.010)

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Table 4.8.1: Linear regression analysis on relationship between benefits derived from social groups and health status.

	B	S.E.	Sig.	t	95% C.I. for EXP(B)	
					Lower	Upper
Useful health information	.123	.114	.278	1.086	-.100	.347
Child care and support	.012	.121	.922	.098	-.227	.250
Easy access to health facilities	.277	.103	.007*	2.692	.075	.480
Access to health care finance	-.076	.103	.461	-.739	-.278	.126
Financial and material support	-.080	.107	.457	-.744	-.290	.131
Easy access to loan	.202	.111	.069	1.823	-.016	.420
Friendship and developing a sense of belonging	.031	.097	.750	.318	-.159	.221
Security	-.184	.088	.038*	-2.084	-.358	-.010

*significant values with p-value less than 0.05

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4.9 Hypothesis 4: Relationship between benefits derived from social groups and wellbeing status.

Table 4.9 shows the result of the cross tabulation between benefits derived from social groups and wellbeing status of the respondents. The result shows that useful health information (X^2 = 11.119; p-value = 0.005), child care support (X^2=11.834, p-value=0.003), security in the neighbourhood(X^2=7.579; p-value=0.020) and invitation to social functions (X^2=7.414; p-value=0.028) were statistically significantly related to wellbeing whereas other variables were not.

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Table 4.9a: Relationship between benefits derived from social groups and wellbeing status.

		Low level Freq. (%)	Average level Freq. (%)	High level Freq. (%)	X^2	p-value
Useful health information						
	Yes	1(0.4)	54(21.7)	194(77.9)	11.119	0.005*
	No	8(5.9)	31(22.8)	97(71.3)		
Child care support						
	Yes	1(0.4)	60(23.9)	190(75.7)	11.834	0.003*
	No	8(6.0)	25(18.7)	101(75.4)		
Easy access to health facility						
	Yes	3(1.4)	45(20.3)	174(78.4)	3.456	0.191
	No	6(3.7	40(24.5)	117(71.8)		
Access to health care finance						
	Yes	2(1.8)	28(25.0)	84(75.0)	0.722	0.736
	No	7(2.6)	57(20.9)	207(75.8)		
Financial and material support						
	Yes	0(0.0)	28(25.0)	84(75.0)	4.406	0.106
	No	9(3.3)	57(20.9)	207(75.8)		
Easy access to loan						
	Yes	0(0.0)	18(28.1)	46(71.9)	2.701	0.225
	No	9(2.8)	67(20.9)	245(76.6)		
Friendship and development of sense of belonging						
	Yes	2(2.0)	31(30.4)	69(67.6)	5.409	0.057
	No	7(2.5)	54(19.1)	222(78.4)		
Security						
	Yes	0(0.0)	37(26.4)	103(73.6)	7.579	0.020*
	No	9(3.7)	48(19.6)	188(76.7)		

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Table 4.9b: Relationship between benefits derived from social groups and wellbeing status.

Involvement in decision making						
	Yes	0(0.0)	25(27.5)	66(72.5)	4.292	0.115
	No	9(3.1)	60(20.4)	225(76.5)		
Satisfaction from developmental activities						
	Yes	0(0.0)	17(20.2)	67(79.8)	2.562	0.310
	No	9(3.0)	68(22.6)	224(74.4)		
Invitation to social function						
	Yes	0(0.0)	35(21.7)	126(78.3)	7.414	0.028*
	No	9(4.0)	50(22.3)	165(73.7)		
Other benefits						
	Yes	0(0.0)	2(15.4)	11(84.6)	0.293	0.810
	No	9(2.4)	83(22.3)	280(75.3)		

*Fishers exact analysis (*significant values with p-value less than 0.05)

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4.9.1: Linear regression analysis on relationship between benefits derived from social groups and wellbeing

Table 4.9.1 presents the association between respondents benefits derived from social groups and wellbeing. Data revealed that benefits derived from social groups and wellbeing were significantly associated with useful health information, friendship and developing a sense of belonging at ($P<0.05$).

The regression analysis shows that there is an inverses relationship between getting useful health information from participating in social groups and wellbeing, which means mothers who got more useful health information are 2.139 more likely to have decreased wellbeing than those who do not. (OR: -2.139, C.I.: -0.299 - -0.013)

Mothers who got to develop friendship and develop a sense of belonging were found to be 2.204 more likely to have higher wellbeing status than those who do not. (OR: 2.204; C.I.: 0.015 – 0.260)

This is to say that getting useful health information on issues relating to health and developing a sense of belonging among group members are the main benefits that influences wellbeing of mothers of under-five children.

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Table 4.9.1: Linear regression analysis on relationship between benefits derived from social groups and wellbeing

	B	S.E.	Sig.	t	95% C.I. for EXP(B)	
					Lower	Upper
Useful health information	-.156	.073	.033*	-2.139	-.299	-.013
Child care and support	.085	.078	.279	1.083	-.069	.239
Easy access to health facilities	-.082	.066	.214	-1.245	-.211	.047
Access to health care finance	.065	.066	.327	.982	-.065	.194
Financial and material support	-.067	.068	.323	-.989	-.201	.067
Easy access to loan	-.011	.072	.877	-.155	-.152	.130
Friendship and developing a sense of belonging	.138	.062	.028*	2.204	.015	.260
Security	-.005	.057	.936	-.081	-.116	.107

*significant values with p-value less than 0.05

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CHAPTER FIVE

DISCUSSION, CONCLUSION AND RECOMMENDATIONS

5.1 Discussion

5.1.1 Socio-demographic characteristics of respondents'

The study respondents were mother with under-five children who came to the health care centres for immunization purpose. Most of them fell between ages 21 – 30 years and very few were below 20 years of age, most of these women were married. In terms of education, many of these women had secondary level of education and this informs the reason why most them were traders and artisans (Hair dressers, Tailors and so on). Others were teachers, civil servants and very few were professionals like lawyers and bankers and so on. Their occupation also determined their level of income as many of them earned below 30,000 Naira per month. Christianity and Islam was the predominant religion in the study area. Religion appears to be highly related to their wellbeing and health as the study showed a significantly strong association between health and religion. Alan, Gregory, Besheer and Anna, (2016) reports that highly religious people are happier and more involved with family and friends, regular religious meetings give them the opportunity to meet more people, have more interpersonal interactions, health and social consciousness. Number of children is also seen to be positively significant to their social capital status.

5.1.2 Structural and cognitive social capital

The result from this study showed that social capital status of the mothers of under-five was low and in turn was not statistically related with their health and wellbeing status. Most of the mothers participated more in their informal and religious groups than in formal groups like political groups and cooperative groups and most of them were ordinary members in the groups they belong to and this was reflected in the sources of social support derived. Ferlander *et al.,* (2016) affirms that women participate in fewer voluntary groups than men because they tend to be more family oriented and often occupying the kin-keeper of the family, they spend more time keeping the home thereby reducing their ability to socialise outside the home.

The results also show that some benefits derived from participating in social networks were positively related to their wellbeing and health. According Rocco & Suhrcke (2012) the

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social capital of can be a significant determinant of his or her health if he or she lives in a region where there is sufficient high community social capital. Involvement in developmental activities help to create a sense of belonging among community members especially among mothers who tend to be actually marginalised in most African setting, sense of belonging can influence behaviours within friends and family networks which indicate that social capital can affect healthy behaviours. The study revealed that the Hospital was a good source of useful health information and child care support. The result and from observation showed that mothers utilised the hospital as a place where they interact with other women when they took their children for immunization and for other purposes, it gave them avenue to share experiences and ideas with others mothers, network and ask questions. WHO (2005) also recognises the hospital as a health promoting setting that takes the responsibility of promoting the health of the community around them. Though social capital is a valuable resource for community development and every member of the society must be able to harness it for a common good. It was observed that mothers of under-five children are too occupied and thus affecting their participation in social groups and network. Majority of them were traders and artisans who lived not far their home and saw no need for social integration. With the advent of internet and social media system, mothers have leant to source for information via the internet which in turn has reduced their contact with groups and community members. Religious groups had the highest percentage of participation and involvement alongside with informal group of family and friends. Religious group and informal group of family and friends were also the most common source of social support among these mothers.

5.1.3 Wellbeing and Health Status of the Mothers of under-five children

The result from this study showed that most of the women had a good considerable level of wellbeing status and that was significantly associated with benefits derived from participating in social groups such as useful health information, child care support, security in the neighbourhood, invitation to various social functions and developing friendship and a sense of belonging. Rocco & Suhrcke (2012) affirms that individuals who are more involved in continuous social interactions (Friends, family, participation in social events, meetings, membership in formal and informal organisations) are more likely to access information on preventive and curative measures of disease than those who are not. Kawachi and Berkman (2000) also describes social capital as a mechanism through which community social capital affects health by providing channels for Health promotion through which there is a rapid

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dissemination of health-related knowledge and information in social networks. It is also a means of creating, ensuring healthy behavioural norms (e.g. regular physical exercise, healthy eating and so on) and exerting social control over harmful health behaviours (e.g. smoking and drinking). The result also showed that most of the mothers received social support from their families and friends. This indicates that family and friends play a good role in helping women overcome major challenges through provision of financial resources for health care and other basic needs provision. Studies (Khosravi *et al*., 2008, Coker 2002) revealed that women who receive emotional, economic and social support from their families are well able to deal with life challenges and problems in more logical and easier way. Family social supports for women who require extra care in dealing with difficult situations can help achieve a crisis period with less psychological burdens. Social family ties create support systems that reduce the rate of physical infirmity and also create an avenue for recuperation to an individual's normal life.

Health status was measured using Body Mass Index (BMI). This is due to the fact that prevalence of obesity has been on the increase in recent times having impacts on morbidity and quality of life. It has also been recognised as one of the main health related challenges that modern societies face. Yaya and Ghose (2019) reported that the prevalence of overweight and obesity is higher among women who are educated above primary level. This study shows a relationship between certain benefits derived from participating in social networks (useful health information, child care support, easy access to health facility and satisfaction from involving in developmental activities) and BMI status. Rohrer *et al.* (2004) discovered that obesity is more common among women who live in low income societies and have large family sizes but do not receive support from their parents than those with large family sizes and parental supports. Social support gotten through networks of friends and family have been linked to increased self efficacy in support networks for diet and physical activity interventions and among post partum mothers who are overweight, social support was shown to influence healthy behaviours that ensures healthy weight. Alvarez *et al*., (2018) identified possible channels that could stand as a mediating factor between social capital and health, one of which is informal control and the improvement of norms of health related behaviours such as of community/group prevalent norms and values such as avoiding sugars and trans fat take up; collective efficacy such advocating situations and conditions that allows for exercise and healthy eating habits; and exchange of social support which could be in form of nutritional advice and support.

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Health status among under-five children was measured using mid upper arm circumference (MUAC) anthropometric measurement. A major cause morbidity and mortality among children globally especially in developing countries is malnutrition. According Gebre *et al*., (2019) The number of children with moderate acute malnutrition is approximately 60 million and 13 million have severe acute malnutrition globally and for this study, 16.1% of the children had moderate acute malnutrition and 3% of them had severe acute malnutrition. Measuring child nutritional health with the use of the mid upper arm circumference (MUAC) has become one of the best prognostic indicator for mortality in children aged 6-59 month, it has been demonstrated to be safe and effective in anthropometric diagnostic of acute malnutrition. Adequate nutrition is very important for child growth and development especially among children below five years of age.

5.1.4 Implication for health and promotion and education

Health Promotion and Behavioural Change recognises the role of communities in improving various health outcomes and thereby many health interventions are taken through communities to archive their goal and get to the target audience. Therefore health intervention planning should take into consideration the structural and cognitive social capital strength of the community so as to ensure knowledge transfer and sustainability of interventions carried out. Health education and promotion programmes should make efforts towards strengthening social groups and networks in the community and also ensuring solidarity, reciprocity of kind gestures, togetherness and trust especially among mothers, this will facilitate easy access into the community and increased knowledge acceptability and retention.

5.2 Conclusion

This study was conducted to investigate the structural and cognitive social capital status of mothers of under-five children and their health and wellbeing status. From the findings, we can draw a conclusion that the level of social capital does not predict the health status of these women using their Body Mass Index but determines their overall wellbeing. Therefore mothers should be encouraged to engage in meaningful and resourceful networks that will facilitate easy access to useful health information and many other benefits needed for considerable level of health and wellbeing status.

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5.3 Recommendations

1. Health information given at the Primary Health Care Centers should include information on women's health and mothers are to be properly monitored to ensure not just the health and wellbeing of their children but also particularly theirs.
2. Health promotion programmes should be more effective in religious centers since more women find religious centers as places where they can socialise and learn to imbibe teachings.
3. Health information on obesity and keeping a healthy weight should be further emphasised through the various social media platforms as it appears that it is still a rampart problem especially among under-five mothers in the study area. This should be done through the various communities and social media means to ensure that there is a change in behaviours and lifestyle leading to obesity and overweight.

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Appendix I

Informed Consent Form

Greetings to you. My name is Dauda Damilola. I am a post graduate student of the Department of Health Promotion and Education, Faculty of Public Health, College of Medicine, University of Ibadan. I am conducting a research on influence of maternal social capital on health and wellbeing of mothers of under-five children in Ido LGA, Oyo State.

Title of research

Influence of Maternal Social Capital on Health and Wellbeing of Mothers of Under-Five Children in Ido Local Government Area.

Name and affiliations of the researcher

This research is being carried out by Dauda Damilola Florence of the Department of Health Promotion and Education, Faculty of Public Health, College of Medicine, University of Ibadan, Oyo state, Nigeria.

Purpose of the research

The purpose of the research is to determine the influence of social capital on health and wellbeing among mothers of under-five in Ido Local Government Area of Oyo State, Nigeria.

Procedure for the research

I will be recruiting 385 respondents into the study and I therefore invite you to take part in the research project. If you accept, you will be asked to take part in answering questions from the questionnaire which will be given to you. No one, other than the researcher or research assistant would be present. The information that will be given will be considered confidential and only Dauda Damilola and her research assistants would have access to such information.

Expected duration of the research and respondent involvement

The duration of the data collection for this research, of which you are invited to take part is 2 weeks and each respondent will spend 10-15 minutes in answering the questions from the qul8estionnaire and taking measurements.

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Risk

There is no physical risk associated with this study as you will be tagged anonymous. i.e. Information such as your name and address would not be taken by the researcher his assistants.

Cost to the participant

Your participation in this study will not cost you anything.

Beneficence

The result of this research is not of direct beneficence to the respondents. However, the results of the research will help policy makers within Nigeria to develop effective interventions that will ensure increase in level of health and wellbeing among Mothers of under-five children.

Confidentiality

Privacy of respondents would be ensured by using serial numbers rather than the name of the respondent, ensuring the respondents anonymity in the research. Research assistants would be trained on the importance of confidentiality and how to maintain it. Whatever information was inputted by the respondents will be kept secret by the researcher and the data will not be disclosed to a third party.

Non-maleficence

I will ensure that this research is risk free and that no harm will come up to respondents.

Voluntariness

Participation of the respondents is strictly voluntary. Respondents can choose to participate or withdraw from the research during the duration.

Ethical consideration

Approval for this study would be obtained from the Edo state Ethics Review Committee, located at the Ministry of Health. Should you have any question about your participation in this research, you can contact the principal researcher:

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Dauda Damilola Florence

Address

Department of Health Promotion and Education, Faculty of Public Health, College of Medicine, University of Ibadan.

Telephone: 08135169881

Email: dmj.florence@gmail.com

Or the supervisor of the research:

Dr. Yetunde John-Akinola

Address: Department of Health Promotion and Education, Faculty of Public Health, College of Medicine, University of Ibadan.

Email: zfisayo@yahoo.com

Statement of person obtaining informed consent:

I have fully explained this research to ____________ and have given sufficient information on the risk, benefit and confidentiality to make an informed consent

DATE: ____________________________ SIGNATURE: ______________________________

NAME: ________________________________

Statement of person given informed consent:

Now that the study has been well explained of me, I fully understand the consent of the study process and I hereby agree to be part of the study.

DATE: ____________________________ SIGNATURE: ______________________________

NAME: ________________________________

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APPENDIX II
QUESTIONNAIRE

Dear Respondents,

This study is being conducted by Dauda Damilola Florence of the Department of Health Promotion and Education, College of Medicine, University of Ibadan, Oyo State, Nigeria. The purpose of this study is to investigate the associations between maternal social capital, health and wellbeing of mothers of under-five children in Ido Local Government Area, Oyo State. Please know that the information provided will be for research purpose alone and your confidentiality will be protected as each questionnaire has a code number to conceal your identity. Your participation in this study is very cogent as it will help to identify the forms of social capital that is necessary for health and wellbeing development especially among women who have under five children. Your willingness implies that you have consented to participate.

Thank you for your cooperation.

Serial Number ____________

SECTION A: SOCIO-ECONOMIC CHARACTERISTICS

Instruction: Kindly respond appropriately to the following by marking or writing as appropriate in the space provided.

1. What is your age as at last birthday (in years) ______________
2. Marital status: Single ( ) Married ( ) Divorced ( ) Widowed ( ) Separated ( )
3. Religion: Islam ( ) Christianity ( ) Traditional ( ) Others ( )
4. Ethnicity: Yoruba ( ) Igbo ( ) Hausa ( ) Others ( )
5. Highest Level of education: No formal education ( ) Primary ( ) Secondary ( ) Tertiary ( )
6. Occupation: _________________
7. Average income per month _____________
8. Number of children ________________________

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SECTION B: STRUCTURAL AND COGNITIVE SOCIAL CAPITAL STATUS

Structural Social Capital (Group membership): In the last year, what group have you been an active member?

S/N	Social Groups	Participation		Level of Participation (position held)		
		Yes	No	Ordinary member	Committee member	Executive member
9	Cooperative group					
10	Women's group					
11	Market group					
12	Political group					
13	Religious group					
14	Informal groups (Family and friends)					
15	Others…………… …………………… …………………….					

Have you received any social support in the last year from any of the following sources?

S/N	Source of social support	Yes	No	Types of support gotten
16	Cooperative groups			
17	Community leaders			
18	Charity organisations			
19	Family and relatives			
20	Religious leaders			
21	Government			
22	Other source…			

Cognitive Social Capital:
Please tick the appropriate response

S/N	Questions	Agree	undecided	Disagree
23	I trust people in my neighborhood?			
24	I get along well with people in my community?			
25	I feel I am are part of my community			
26	I will talk with a local authority or			

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	governmental organisation about problems in this community if any			
27	In general, majority of people in this community can be trusted?			
28	Majority of people in my community generally get along with each other?			
29	I think that the majority of people in this community would try to take advantage of me if they get the chance to?			

Benefits derived from participation

S/N	List of benefits derived from participation in Social networks	Yes	No
30	Useful health information		
31	Developing a sense of belonging and friendship among group members		
32	Access to health care finance provision		
33	Easy access to health facilities		
34	Invitation to social function by group members, eg ceremonies like wedding, burial etc.		
35	Involvement in decision making		
36	Satisfaction from involving in developmental activities in the community		
37	Others…………………………………………………………………..		

Section C: Wellbeing and Health Status

Please tick the box that best describes your experience of each over the last 2 weeks

S/N	Statements	Not at all	Some times	Often times
38	I've been feeling optimistic about the future			
39	I've been feeling useful			
40	I've been feeling relaxed			
41	I've been feeling interested in other people			
42	I've had energy to spare			
43	I've been dealing with problems well			
44	I've been thinking clearly			
45	I've been feeling good about myself			
46	I've been feeling confident			

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47	I've been able to make up my own mind about things			
48	I've been feeling loved			
49	I've been interested in new things			
50	I've been feeling cheerful			
51	I am satisfied with my income level			
52	I need more income generating activities to improve my income level			
53	I am dealing with my business challenges well with the help of other market women			
54	I have savings to fall back to in hard times			
55	I need to borrow money to make ends meet			
56	I can afford to get my basic needs from the work I do			
57	My business gives me joy and satisfaction			
58	My business gives me less stress			

Anthropometric measures of Mothers
Weight _________________
Height __________________
BMI ___________________
Anthropometric measures of the under-five child
MUAC_________________

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ILANA IWE-IBEERE

Ẹyin Olùkópa wa Owọn,

Mo jẹ̀ akẹ̀ẹ́kọ̀ làtí ile ìwé giga Yunifàsitì tí Ilẹ Ibádán ni ẹka tí àtí n risi eto nípa idanilẹkọọ ati igbega eto ilera, ti o wan i Kolẹẹji tí ati n se itọju pélu oogun, Ni abala Tí ohun risi eto ilera àwọn ara ilu, Mo nse iwadi bi kikopa ninu egbe ati ibare po larin awon iya omo ti ojo ori won ko to odun maarun se nmu ilera ni ijoba ibile Ido ni ilu Ibadan, ni orilede Naijiriya. Kikopa nínúu iwadi yìí jẹ̀ tí eyi ti oti okan yin wa, ati fi ohunka idanimọ si ara awọn iwe ibeere kookan lati dabobo idanimọ yin. Gbogbo àlàyé tí ẹba si se fún mi ninu iwadi yi ni yìí o wa ni ipamọ larin emi àtí ẹyìín, mi ko sini se afihan rẹ fún ẹnikẹni.

Kikopa yin ninu iwadi yii ṣe pataki pupọ nitoriwipe yi o ṣe iranlọwọ fun oluwadi lati mọ iriri awọn iya ọmọde nipa irẹwẹsi lẹyin ibimọ ati biwọn se hun se ifarada rẹ. Ẹ jọwọ ẹni lati ṣe akiyesi wipe ko si idahun ti o tọ tabi eyi ti kotọ ninu gbogbo idahun eyikeyi ti ẹba fi esi si awọn ibeere ti a ba bi yin. Didahun si awọn ibeere yi ko ni gbayin ni akoko pupọ, nitoriwipe ko ni gbayin ju ogun tabi ogbọn isẹju lọ. Ki a to maa tẹ siwaju, o tunmọ siwipe ẹ ti fi aramọ lati kopa ninu iwadi yi pẹlu gbigba lati kopa ninu ifọrọwanilẹnuwo.

A dupẹ lọwọ yin fun ifọwọsowọpọ yin.

Ohunka Idanimọ____________

Idanimọ___________________

IPIN A (Alàkọ̀kọ́): (ÀLÀYÉ LORI ETO IGBESIAYE OLÙKÓPA)

Ilana: E jowọ ẹ fi idahun si awọn ibeere wọn yii pẹlu fi fi ila tabi kikọ esi ti o yẹ si awọn alafo ti a pese.

1. Ọmọ ọdún melo ni ẹ jẹ̀ ni igba tie se ọjọ ibi yin kẹhin (ni ọdun)? ______________

2. Kíni ipo igbeyawo yìín? (1) Mi o tí fe oko (2) Mo tí ni oko (3) Mo tí fi oko mi sile (4) Mo tí ko oko mi sile (5) Oko mi tí ku

3. Kíni ẹsin tí en sin? (1) Kristíani (2) Musulumi (3) Elesin Ibile (4) Elesin miran: (ẹ dárúkọ ẹ̀ ni pàtó) _______

4. Kíni Eya tí ẹ tíwa? (1) Yoruba (2) Igbo (3) Hausa (4) Eya miran: (ẹ dárúkọ ẹ̀ ni pàtó) _________

5. Kíni ipéle tí ẹ ka ìwé de? 1= Mi o ka iwe Kankan rara 2 = ile ìwé alakobere 3 = Ile ìwé girama 4= Ile iwe giga agba

6. Kini iṣẹ-iṣẹ yin:

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7. elo ni owo to un wole funyin losoosu? ___________

8. Ọmọ melo lebi? ___________________

IPIN B(ELEKEJI): ibeere lori ikopa ati ibarepo.

S/N	Egbe	Kikopa		Ipele ikopa		
		beeni	**beeko**	**Omo egbe lasan**	**Omo egbe aajo eleto**	**Okan lara adari ebge**
9	Egbe alafowosowopo					
10	Egbe Obirin					
11	Egbe oloja					
12	Egbe oloselu					
13	Egbe elesin					
14	Omiran…………… …………………… …………………….					

Cognitive Social Capital:

Jowo, fa igi kekere siwaju esi to to si o

S/N	ibeere	Mofara mo gidi gan	mofara mo	mioleso	Mio fara mo	Miofara mo rara
15	Mo gba awon ara agboole mi gbo					
16	Mo maa nba awon ara ilu mi se					
17	Mori arami bi okan lara awon omo ilu					
18	Bi a doju ko Kankan ba wa ninu ilu, mole to awon adari ilu lo					
19	Ni babambari opolopo awon omo ilu yi lose Gbagbo.					
20	Opolopo awon omo ilu yii maan bara won se					
21	Molero pe opolopo awon omo iluyii yio fe yan mi je bi won ba ri aaye					

Aafani lataare kikopa ninu egbe

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S/N	Awon aafani lataare ikipa ninu egbe	beeni	beeko
21	Oro ilera to wulo		
22	Nini oye ijamo nkan ati ibanidore laarin egbe		
23	Eto si isuna eto ilera to peye		
24	Eto si ohun eto ilera pelu ironrun.		
25	Ipe si awon ode lati odo omo egbe fun apeere isomoloruko, isinku abbl		
26	Kikopa ninu ipinu sise		
27	Itelorun lori kikopa ninu eto idagbasoke laarin ilu		
28	Omiran………………………………………………………………..		

IPIN D (ELELEKETA) : Ipo Ilera ati Didara

Jowo se ami si apoti ti o se apejuwe iriri re ni awon ose meji to koja.

S/N	Gbolohun	rara	lekankan	Ni igba pupo	Ni gbogbo igba
29	Mo ti nni ero daadaa fun ojo iwaju				
30	Mo ti nri ara mi bi eni to wulo				
31	Mo ti nrewesi				
32	Mo ti nni ife ninu awon eeyan				
33	Mo ni okun ti nko ni lo				
34	Mo ti nyanju awon idojuko kan daadaa				
35	Ironu mi tin ja geere				
36	Mo ti nro daadaa nipa ara mi				
37	Mo ti ro ero akin pelu igboya				
38	Mo tin le se ipinnu ninu okan mi nipa awon nkan				
39	Mo ti nni ero wipe awon eniyan feran mi				

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40	Mo ti nni ife si awon nnkan titun				
41	Mo ti nni ero idunnu				
Yiye osuwon alaafia wo nipa ohun ini lataare ere lori ise ati apamowo owo					
42	Ere ti mo nni temi lorun				
43	Mo nilo opolopo irufe ise sii lati mu apamowo owo mi peleke si				
44	Mo nse abojuto awon idojuko eto aje mi daadaa pelu atileyin awon obinrin to ku loja				
45	Mo ni owo ni ipamo ti mo le lo si ti nkan ba fe le				
46	Mo nilati ya owo kin le ri ojuse mi se				
47	Mo le bo ara mi pelu iru ise ti mon se				
48	Ise ti mo nse fun mi ni ayo ati itelorun				
49	Ise mi ko fun mi ni wahala lo titi be				

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APPENDIX THREE

CODING GUIDE

Question	Var Name	Statement	Variable Label	Code
Section A				
1	Age	What is your age as at last birthday (years)	<20	1
			21-30	2
			31-40	3
			41-50	4
			>50	5
2	MR	Marital Status	Single	1
			Married	2
			Divorced	3
			Widowed	4
			Others	5
3	Religion	Religion	Islam	1
			Christianity	2
			Traditional	3
			Others	4
4	Ethnicity	Ethnicity	Yoruba	1
			Igbo	2
			Hausa	3
			Other	4
5	Education	Highest level of education	No formal education	1
			Primary	2
			Secondary	3
			Low post secondary	4
			Tertiary	5
6	occupation	Occupation	Civil servant	1
			Artisan	2
			Professional	3

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			Unemployed	4
			Trader	5
			Student	6
			Teachers	7
			Lawyer	8
			Farmer	9
			Clerics	10
7	Income	Average income per month	0 – 10000	1
			11000 – 30000	2
			31000 – above	3
8	Children	Number of children		
Section B				
9	Cooperative	Cooperative group	Yes	1
			No	2
10	Women	Women's group	Yes	1
			No	2
11	Market	Market group	Yes	1
			No	2
12	political	political group	Yes	1
			No	2
13	Religious	Religious group	Yes	1
			No	2
14	Informal	Informal group	Yes	1
			No	2
15	Other	Other group	Yes	1
			No	2
16	Trust	I trust people in my community	Agree	3
			Undecided	0
			Disagree	1
17	Maj	In general majority of people in this community can be trusted	Agree	3
			Undecided	0
			Disagree	1

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18	Feel	I feel I am part of my community	Agree	3
			Undecided	0
			Disagree	1
19	Talk	I will talk with a local authority or government organisation about problems on my community	Agree	3
			Undecided	0
			Disagree	1
20	Alongwell	I get along well with people in my community	Agree	3
			Undecided	0
			Disagree	1
21	Maj.along	Majority of people in my community generally get along with each other	Agree	3
			Undecided	0
			Disagree	1
22	takeAdvan	I think that the majority of people in this community would try to take advantage of me if they get the chance to?	Agree	3
			Undecided	0
			Disagree	1
23	Copgrp	Cooperative groups	Yes	1
			No	2
24	Comleader	Community leaders	Yes	1
			No	2
25	Fam/rel	Family and relatives	Yes	1
			No	2
26	Relgrp	Religious groups	Yes	1
			No	2
27	Govrn	Government	Yes	1
			No	2
28	Othersource	Other source	Yes	1
			No	2
29	Healthinfo	Useful health information	Yes	1
			No	2

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30	Childcare	Child care support	Yes	1
			No	2
31	Healhfac	Easy access to health facilities	Yes	1
			No	2
32	Loan	Easy access to loan	Yes	1
			No	2
33	Friendship	Friendship and developing a sense of belonging among 2group members	Yes	1
			No	2
34	Security	Security in the neighbourhood	Yes	1
			No	2
35	Decisionmakng	Involvement in decision making	Yes	1
			No	2
36	Dev.activities	Satisfaction from involving in developmental activities in the community	Yes	1
			No	2
37	Socialfunc	Invitation to social function by group members/community members	Yes	1
			No	2
38		Others	Yes	1
			No	2
Section C				
39	Optimistic	I've been feeling optimistic about the future	Rarely	1
			Sometimes	2
			All the times	3
	Feelinguseful	I've been feeling useful	Rarely	1
			Sometimes	2
			All the times	3
40	Feelingrelaxed	I've been feeling relaxed	Rarely	1
			Sometimes	2
			All the times	3
41	Interested	I've been feeling interested	Rarely	1

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		in other people	Sometimes	2
			All the times	3
42	Energytospare	I've had energy to spare	Rarely	1
			Sometimes	2
			All the times	3
43	Dealingwell	I've been dealing with problems well	Rarely	1
			Sometimes	2
			All the times	3
44	Thinking	I've been thinking clearly	Rarely	1
			Sometimes	2
			All the times	3
45	Fellinggood	I've been feeling good about myself	Rarely	1
			Sometimes	2
			All the times	3
46	Confident	I've been feeling confident	Rarely	1
			Sometimes	2
			All the times	3
47	Mind	I've been able to make up my own mind about things	Rarely	1
			Sometimes	2
			All the times	3
48	Loved	I've been feeling loved	Rarely	1
			Sometimes	2
			All the times	3
49	Interested	I've been interested in new things	Rarely	1
			Sometimes	2
			All the times	3
50	Cheerfull	I've been feeling cheerful	Rarely	1
			Sometimes	2
			All the times	3
51	Incomelevel	My income level is satisfactory	Rarely	1
			Sometimes	2
			All the times	3

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52	Moreincome	I need more income generating activities	Rarely	1
			Sometimes	2
			All the times	3
53	Challenges	I am dealing with my business challenges well with the help of other market women	Rarely	1
			Sometimes	2
			All the times	3
54	Savings	I have savings to fall back to in hard times	Rarely	1
			Sometimes	2
			All the times	3
55	Borrowmny	I need to borrow money to make ends meet	Rarely	1
			Sometimes	2
			All the times	3
56	Basicneeds	I can afford to get my basic needs from the work I do	Rarely	1
			Sometimes	2
			All the times	3
57	Joy	My business gives me joy and satisfaction	Rarely	1
			Sometimes	2
			All the times	3
58	Lessstress	My business gives me less stress	Rarely	1
			Sometimes	2
			All the times	3
Categorisation of aggregate wellbeing scores According to WEMWBS			0-21	low
			22-42	Average
			43-63	High
59	BMI	Mothers' BMI	Underweight(0-18.5)	1
			Normal weight(19.0-24.9)	2
			Overweight (25- 29.9)	3
			Obese (30-39.9)	4

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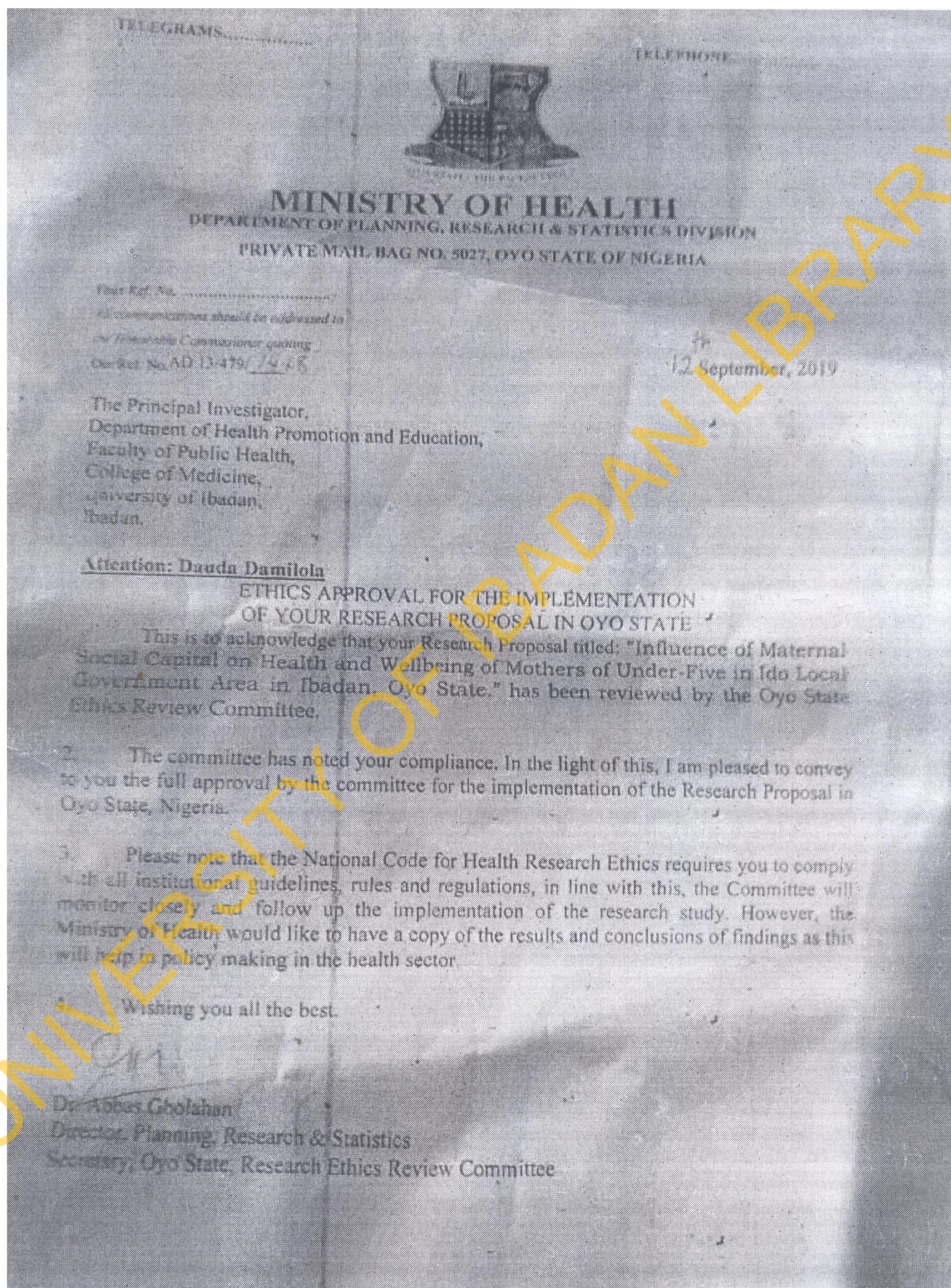
APPENDIX FOUR

ETHICAL APPROVAL LETTER



TELEGRAMS..............

TELEPHONE..............

MINISTRY OF HEALTH

DEPARTMENT OF PLANNING, RESEARCH & STATISTICS DIVISION

PRIVATE MAIL BAG NO. 5027, OYO STATE OF NIGERIA

Your Ref. No. ....

All communications should be addressed to the Honourable Commissioner quoting

Our Ref. No. AD 13/479/ 1468

12 September, 2019

The Principal Investigator,
Department of Health Promotion and Education,
Faculty of Public Health,
College of Medicine,
University of Ibadan,
Ibadan.

Attention: Dauda Damilola

ETHICS APPROVAL FOR THE IMPLEMENTATION
OF YOUR RESEARCH PROPOSAL IN OYO STATE

This is to acknowledge that your Research Proposal titled: "Influence of Maternal Social Capital on Health and Wellbeing of Mothers of Under-Five in Ido Local Government Area in Ibadan, Oyo State." has been reviewed by the Oyo State Ethics Review Committee.

2. The committee has noted your compliance. In the light of this, I am pleased to convey to you the full approval by the committee for the implementation of the Research Proposal in Oyo State, Nigeria.

3. Please note that the National Code for Health Research Ethics requires you to comply with all institutional guidelines, rules and regulations, in line with this, the Committee will monitor closely and follow up the implementation of the research study. However, the Ministry of Health would like to have a copy of the results and conclusions of findings as this will help in policy making in the health sector.

4. Wishing you all the best.

Dr. Abbas Gbolahan
Director, Planning, Research & Statistics
Secretary, Oyo State, Research Ethics Review Committee

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