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Knowledge Attitude and Practice of Rural Community Residents towards Consanguineous Marriages

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Abstract

Although consanguineous marriages are widely practiced in Islamic countries, the attitude of community towards consanguineous marriages and the awareness of its health consequences to offspring remain largely ignored.

The purpose of the study is to assess the knowledge of rural community towards health risk due to consanguineous marriages, attitude of rural community towards benefits regarding consanguineous marriages and practice of rural community regarding consanguineous marriages in the rural community. This quantitative descriptive cross-sectional study. The results shows that community have poor knowledge, positive attitude and practice rate of consanguinity is very high. The study concludes that rural community has illiteracy regarding health risk for offspring due to consanguineous marriages, results shows that they are attracted to consanguineous marriages because it has many socio- economic and psychological benefits and these benefits are making cause to increase the interest of consanguineous marriages in future.

Keywords: Consanguineous Marriage, Attitude, Knowledge, Community.

Introduction

Consanguine is a Latin word which means descended from same parents or ancestors and consanguineous is a blood relationship (Abdalla & Zaher, 2013). Consanguineous marriages are defined as the marriage or unions between individuals of the same blood or between first cousins or second cousins or close biological relatives other than siblings (Islam, 2017). First cousins are really uncle and aunt's children and Second cousins are your parents' first cousins but they are your second cousins (Sandridge, Takeddin, Al-Kaabi, & Frances, 2010). Consanguineous marriages is mostly found in Asian and African countries especially in Muslim societies, whereas, its occurrence is low in Western (non-Muslim) countries (Bittles & Hamamy, 2010). For Example; in

most Arab countries, consanguineous marriage rate range from 20% to more than 50%, favoring first cousin marriages (Alnaqeb, Hamamy, Youssef, & Al-Rubeaan, 2016). In Saudi Arabia, 56% of all marriages are reported to be between consanguineous couples (Alnaqeb et al., 2016). In the Asian countries, consanguineous marriages have been reported from (25% to 60%), Syria (35.4%), Jordan (51.25%) and Lebanon (42%), especially among first cousins, there are tribal populations in some areas with more dominance of consanguineous marriages (Sedehi, Keshtkar, & Golalipour, 2012). Moreover, a study shows that the rate of consanguineous marriages in Pakistan are 80% which is very high (Aslamkhan, 2015). Another study shows that occurrence of consanguineous marriages in Pakistan ranged from 31.1 to 62 % (Riaz, Mannan, & Malik, 2016). Likewise, a study shows that the rural communities have more interest in consanguinity rather than urban community and in Pakistan our rural population is almost totally ignorant of deleterious effects of consanguinity (Islam, 2017). In urban areas less than 20 percent people know about harmful effects of the so called "cousin marriage" (Aslamkhan, 2015). Consanguinity is much appreciated in Arabic, Asian and Islamic countries and this attitude is grooming day by day because consanguineous marriages have many socio-economic and psycho-social benefits like bride/groom has familiarity with his/her in-law's family and consanguineous marriages also make cause of financial consideration because consanguineous marriages help to decrease economic expenditures (Islam, 2017). Furthermore, Islam (2017) has also discussed in his study that Asians have positive attitude towards consanguineous marriages because they have benefits in consanguineous marriages like consanguinity can be lessen the risk of divorce, consanguineous marriages promote more harmonious and loving relationship between bride/groom and in-law's family, it is also thought that bride will be more respected due to consanguinity by her in-law's , relatives will behave in a better way with bride because she is from their relatives (Islam, 2017). In additionally, consanguineous marriages will be lessen the risk of mistreated with bride/groom in his/her in-law's, consanguineous marriages are very helpful for husband and wife in case to raise their children because grandparents have more affection with their grandchildren, therefore, they can bitterly take care their grandchildren as copier to a maid or servant. On the other hand, consanguineous marriages also promote stability of tradition, culture, stronger religious belief, stronger religious practice and cultural compatibility but consanguineous marriages promotes to health risks factors (Sandridge et al., 2010). But people should have knowledge about complications and bad effects of consanguineous marriages on their own health and on their offspring. According to findings of Aslamkhan, (2015) consanguinity increases the risk of birth defects and genetic problems (Aslamkhan, 2015). Islam, (2017) has also explored that blood diseases, inborn error of metabolism, deafness, anomalies of extremities are all caused by consanguineous marriages (Islam, 2017). Sandridge et al., (2010) have mentioned in their observations that consanguineous marriages are increasing the rate of congenital heart problems, down syndrome, light hair, light skin, light eyes case in Islamic countries (Sandridge et al., 2010). Moreover, the practice of Consanguineous marriages is very common in Eastern countries and consanguineous marriages have many types like marriage between first cousins (son or daughter of real aunt or uncle), second cousins (first cousin of parents) and third cousins (second cousin of parents) (Sandridge et al., 2010). In additionally, Sandridge et al., (2010) has identified through his study that first type of consanguineous marriages mean marriage between first cousins is more prone to cause of blood diseases and genetic problems (Sandridge et al., 2010).

Study Gap

This study is expected to fill the gap in knowledge about the central feature of kinship structure and its dynamics in Pakistan and the findings of the study may have important policy implications for public health strategies.

Problem Statement

Consanguineous marriages are very common in rural communities. According to a study in Pakistan rural community has poor knowledge rather than urban community regarding bad consequences of consanguineous marriage (Aslamkhan, 2015). In Hussaina Abad, rural community of Lahore, Pakistan, Consanguineous marriage are very common and many cases of congenital (at birth) disorders are identified during community visits they are also evident in the prioritized health problems list which shows that 20% health problems are related to blood disorders, autosomal recessive, deafness, degenerative brain disease among children. Several studies have shown that consanguineous marriages can increase the disability of the offspring due to birth defects and the pro-reproductive mortality (Islam, 2017).

Research Questions

Research Question 1- Knowledge of the community residents towards consanguineous marriages.

Research Question 2- Attitude of the community residents towards consanguineous marriages.

Research Question 3- Practice of the community residents towards consanguineous marriages.

Aims of the Study

The basic aim of the study is to assess the knowledge, attitude and practice of rural community residents towards consanguineous marriages.

Significance of the Study

The significance of the study in the Hussaina Abad community that community residents are able to know that consanguineous marriages have bad consequences on their offspring's health and after health education they would be learned to control their practice regarding consanguineous marriages. This study has also help me as nurse to learn more about bad consequences of consanguineous marriages on health and has also help to understand and explore which factors motivate people to practice consanguineous marriages. Through this study, will direct the policy maker, Non-governmental organizations and other governmental service provider shows guidelines to concerned bodies on how to implement the service in order to overcome the problem.

Literature Review

Consanguineous marriage is the practice of marrying with close blood relatives, commonly cousins, is a socially acceptable practice in many countries around the world (Salway et al., 2016). However, there are many studies which shows that the trend of consanguinity in Asian, African and Arabian countries is very common (Sedehi et al., 2012). Moreover, Consanguineous marriages are those marriages which held between close blood relations like first cousin (son or daughter of our real aunt or uncle), second cousin (first cousin of our parents), third cousin, half

first cousin (Sandridge et al., 2010). Likewise, Bittles' (2012) study shows that consanguinity is a common type of marriage in the Middle East (Bittles, 2012). In recent study of Mazharul Islam, (2017), he is also agree with Bittles', (2012) study the rate of consanguineous marriages in Middle East have been increasing rapidly (Islam, 2017). Whereas, Consanguineous marriages are not appreciated in western countries (Sedehi et al., 2012). Therefore, consanguineous marriages are also practiced in Pakistan and consanguineous marriages rate is comparatively high to non-consanguineous marriages as study depicts that in Pakistan consanguineous marriages are ranging from 38-59% of the total marriages, and first-cousin marriages are most common type of consanguineous marriages (Jabeen & Malik, 2014). Another, study of Riaz et al. (2016), in Pakistan consanguineous marriages were observed 58.5% whether, non-consanguineous marriages were 41.5 % (Riaz et al., 2016). Moreover, a study mentions that the major cause of consanguineous marriages in Eastern countries is that consanguineous marriages strengthen family ties and retain property within the family (Abdalla & Zaher, 2013). Likewise, according to Abdalla & Zaher (2013), this attitude in Muslim countries is promoting because consanguineous marriages may have solid benefit that consanguineous marriages can improve the position of bride by decreasing the chances of maltreatment from a husband bound by family ties; and consanguineous marriages also decrease the chance of divorce (Abdalla & Zaher, 2013). In addition, a study shows that consanguineous marriages are also beneficial for community that consanguineous marriages reduce dowry or bride-wealth payment requirements it can also say that consanguineous marriages give financial considerations (Islam, 2017). Moreover, the results a study show, that people are interested in consanguineous marriages that consanguineous marriages strong their religious compatibility beliefs, practices and culture compatibility between husband and wife (Sandridge et al., 2010). Furthermore, Abdalla & Zaher (2013), also have worked on consanguineous marriages and their results show that the main achievement of consanguineous marriages are to keep family property within the parental families because people thought that if their offspring marry to outsider than their property would be divided (Abdalla & Zaher, 2013). There is a strong misconception that Islam orders to promote consanguineous marriages whereas, it's totally wrong concept according to a study of Abdalla & Zaher (2013), a hadith (a record of the pronouncements of Prophet Mohammad "PBUH") is cited: "marry from afar (not nearby relatives) so that the offspring is not weakened" (Abdalla & Zaher, 2013). However, there are several studies which shows that people should have knowledge about bad consequences of consanguineous marriages like consanguineous marriages increasing the rate of birth defects, genetic problems and blood diseases (Aslamkhan, 2015; Bittles, 2012). According to Bage, & Rao, (2016), a study conducted which represented that consanguineous marriages were making cause of congenital heart problems (Bage & Rao, 2016). Moreover, a study Sedehi, et al., (2012), shows that consanguineous marriages are making cause to increase the rate of deafness, anomalies of extremities among children in Asian countries (Sedehi et al., 2012). However, there are several studies which shows that consanguineous marriages are not only the making cause of down syndrome (Islam, 2017), but also light hair, light skin and light eyes among children whom parents are married consanguineously (Sandridge et al., 2010). Moreover, practice of consanguineous marriages are those marriages which held between close blood relations like first cousin (son or daughter of our real aunt or uncle), second cousin (first cousin of our parents), third cousin, half first cousin (Sandridge et al., 2010). In additionally, consanguineous marriages between first cousins is more popular than any other type of marriage

(Alnaqeb et al., 2016). However, according to study of Bittles., (2012) consanguineous marriages between first cousins are also very dangerous for offspring's health (Bittles, 2012).

Conceptual Framework

In this study Patricia Benner's, (1984) conceptual model has been use to discuss the variables and their relationship.

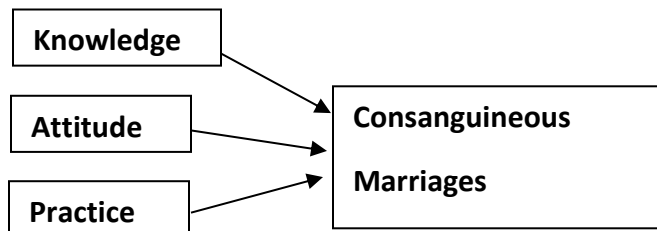


Figure 1. The relationship of Knowledge, Attitude and Practice of community residents with consanguineous marriages.

In this conceptual framework there are three variables knowledge, attitude and practice which are affecting on fourth variable which is consanguineous marriages. There are many sub variables of knowledge, attitude and practice which have been discussed in conceptual framework.

Methodology

Setting

This study was conducted in the rural community Hussain Abad, Lahore, Pakistan.

Research Design

A quantitative descriptive cross-sectional study was used to assess knowledge, attitude and practice of rural community towards consanguineous marriages.

Population

All adult male and female of the rural community Hussain Abad, Lahore, Pakistan.

Sampling

Data was collected using convenient sampling technique.

Research Instrument

A questionnaire was designed for this study to gather data to answer the research questions.

Data Gathering Procedure

The 23-item questionnaire was use to collect data. The parents will require indicating their agreement or disagreement with each of the statements about children's education in a Five-point Likert type scale, where "Agree 1" "Strongly Agree 2" "Neutral 3" "Disagree 4" Strongly Disagree 5". Questionnaire is adopted by the study of Consanguinity In Qatar: Knowledge, Attitude And Practice In A Population Born Between 1946 And 1991 (Sandridge et al., 2010).

Questionnaire was translated in to Urdu for the understanding of the participants and questionnaire would be read loudly if participant could not read it.

Analyze Data

After Collecting data would be put on SPSS version 21 for analysis. Descriptive study would be analysis in frequencies, bar charts and tables.

Study Timeline

The duration of study is approximately 4-5 months from September 2017 to January 2018.

Ethical Consideration

Data was collected from Hussain Abad community after taking permission from rural community "Numberdar". Informed consent was taken from participants. All participants would have open opportunity to participate in research. No one would be forced to participate in research. All the participants women would be informed that obtained data would remained confidential and would use only for research purpose.

Results

This section presents the outcomes of the study.

Profile of the Respondents

The study population is Husain Abad community and target population are all adult male and female of the rural community. Data collected from the rural residents of the Hussainabad community, Lahore to assess the knowledge, attitude and practice of rural community towards consanguineous marriages, and they show 100% response to the current study. The data analysis consists of two parts. Demographic is the first part of data analysis which gives details about demographic variables. Second part is descriptive analysis which provide us recurrence and rate of respondent regarding 23 item of questionnaire.

Part 1- Demographics*Table 1- Demographic characteristics of Hussain Abad (Gender, Education, Religion, Marital Status)*

	Group	Frequency	Percent
Gender	Male	62	40
	Female	93	60
	Total	155	100
Education	Illiterate	26	16.8
	Primary	41	26.5
	Middle	23	14.8
	Matric	40	25.8
	Graduation	10	6.5
	Others	12	7.7
	Total	155	100.0
	Religion	Muslim	133
Christian	22	14.2	
Total	155	100.0	
Marital status	Married	129	83.2
	Unmarried	26	16.8
	Total	155	100.0

Above table depicts that participants of the study were n=155, male 62 and female were 93. Mostly participants' education was 41(26.5%) Primary, 40(25.8%) Matric, 26(16.8%) Illiterate, 23(14.8%) Middle, only 10(6.8%) Graduated and 12(7.7%) were having religious and technical certified. Third demographic variable is Religion 133(85.8%) participants were Muslims and 22(14.2%) were Christians. Fourth demographic variable is Marital Status 129(83.2%) married and 26(16.8%) unmarried.

Part 2- Descriptive Analysis*Table 2- Community Knowledge towards Consanguineous Marriages*

S#	Questions	Yes F (%)	No F (%)	Don't Know F (%)
1.	Do you believe that? Consanguinity increases the risk of birth defects and Genetic problems?	40 25.8%	103 66.5%	12 7.7%
2.	Consanguinity Increases the risk of blood diseases?	23 14.8%	110 71.0%	22 14.2%
3.	Consanguinity increases the risk of inborn errors of metabolism?	33 15.5%	108 69.7%	23 14.8%
4.	Consanguinity increases the risk of deafness, anomalies of extremities, heart conditions?	33 21.3%	104 67.1%	18 11.6%
5.	Consanguinity increases the risk of down syndrome?	26 16.8%	118 76.1%	11 7.1%
6.	Consanguinity increases the risk of [Occurrence] of light hair, light skin, light eyes?	21 13.5%	111 71.6%	23 14.8%

Above table 2 reveals the result of 1-6 questions about knowledge of the participants regarding consanguinity, outcome indicates that members of the current study show participants have poor knowledge regarding the risks of consanguinity. Because in reaction to question 1-6 the frequencies and percentage of "Yes" is low whereas frequencies are percentage of "No" is high there are many participants who "Do not know" means have no idea about the risks due to consanguinity.

Table 3- Community Attitude towards Consanguinity

Questions. Given that a consanguineous marriage is going to occur do you believe. "Agree 1. Strongly agree 2. Neutral 3. Disagree 4. Strongly Disagree 5."						
S#	Questions	1	2	3	4	5
1	One benefit is that the bride/groom is already familiar to other members of the family?	88 56.8%	60 38.7%	4 2.6%	3 1.9%	0
2	One benefit is that the bride/groom is already familiar to their son/daughter?	98 63.2%	44 28.4%	13 8.4%	0	0
3	Consanguineous marriages are contracted because of financial considerations?	20 12.9%	56 36.1%	37 23.9%	24 15.5%	18 11.6%
4	Consanguineous marriages are contracted because of less risk of divorce?	2 17.4%	37 23.9%	63 40.6%	25 16.1%	3 1.9%
5	Marriages between relatives are more harmonious and loving?	31 20.0%	65 41.9%	17 11.0%	38 24.5%	4 2.6%
6	One benefit of consanguinity is that a bride will be more respected by her husband since she is his relative?	20 12.9%	51 32.9%	26 16.8%	42 27.1%	16 10.3%
7	Where the mother-in-law is the sister of the bride's mother, one benefit is the bride will get along better with her new relatives?	24 15.5%	55 35.5%	9 5.8%	62 40.0%	5 3.2%
8	One benefit of consanguinity is that there is less risk of mistreatment of the woman if she marries within the family?	24 15.5%	36 23.2%	35 22.6%	40 25.8%	20 12.9%

9	One benefit of consanguinity is it is easier to raise children when the parents are relatives?	24 15.5%	37 23.9%	46 29.7%	41 26.5%	7 4.5%
10	One benefit is that consanguinity promotes stability, traditions and continuity of a culture and a way of life?	27 17.4%	57 36.8%	27 17.4%	29 18.7%	15 9.7%
11	One benefit to the couple is that there will be stronger religious compatibility in belief?	39 25.2%	52 33.5%	25 16.1%	39 25.2%	0
12	One benefit to the couple is that there will be stronger religious compatibility in practice?	40 25.8%	47 30.3%	30 19.4%	23 14.8%	15 9.7%
13	One benefit is that there will be stronger cultural compatibility between husband and wife?	27 17.4%	65 41.9%	19 12.3%	29 18.7%	15 9.7%
14	One benefit is that if there are any health risks these health risks will be known because the families know each other?	24 15.5%	69 44.5%	33 21.3%	29 18.7%	0
15	Consanguinity Causes genetic abnormalities?	52 33.5%	41 26.5%	34 21.9%	28 18.1%	0
16	Consanguinity Causes health problems?	50 32.3%	22 14.2%	38 24.5%	45 29.0%	0

In reaction of (1-16) items of Attitude of participants towards the benefits of consanguinity majority of the respondents express positive attitude "Agree and Strongly Agree", some part of the study members were neutral and some were disagree. But in reaction to 4 question majority was neutral 63(40.6%). Complete details presents in above table.

Table 4 Community Practice towards Consanguinity;

S#	Question	1	2	3	4
1	Consanguineous Status of respondents to spouse	124 80.0%	16 10.3%	8 5.2%	7 4.5%

First cousin 1. Second cousin 2. Other relation 3. No relation 4.

Table 4 specify the results of 1 item which reveals us that which type of consanguineous status of respondents to spouse it had four categories "First cousin", "Second cousin", "Other Relation", "No Relation". And results show that majority respondents were married with first cousin 124(80.0%) and only 16(10.3%) second Cousin, 8(5.2%) other relation, 7(4.5%) no relation.

Discussion

Consanguinity is of particular interest as a potential risk factor in this region and therefore accurate statistics on its prevalence are crucial for public health planning purposes. Additionally, accurate information as to the reasons for its popularity will help community health educators develop strategies to minimize potential negative consequences arising from the practice.

The current study shows that community has poor knowledge regarding health risks due to consanguineous marriages. There is another reason of poor knowledge that rural community has high rate of illiteracy the results of the study shows that majority of that participants are only educated till primary 41(26.5%) and only 10(6.5%) are graduated. this study also reveals that rural community has strong attitude towards the benefits due to consanguineous marriages, therefore, practice of consanguineous marriages is very high especially with first cousin which has very high influence for health risk.

Many studies shows that congenital problems, birth defects, mental retardation, down syndrome and blood diseases are commonly found in this very type of marriages which were occurred between first cousins.

For the rural participants four reasons were tied for the most strongly believed. These reasons were (1) stability, traditions and continuity of a culture and way of life; (2) familiarity of the bride/groom to their son/daughter; (3) familiarity to other members of the family; and (4) stronger religious compatibility in belief between husband and wife.

Those who were not the product of a consanguineous relationship thought that consanguinity would encourage stronger religious compatibility in practice between husband and wife; familiarity; stability, traditions and continuity of a culture and a way of life; knowledge of health risks will be known; and stronger religious compatibility in belief.

Although a substantial proportion of community people seemed to have some awareness about increased risk of congenital anomalies associated with consanguineous marriage in community, they still have a high positive attitude towards consanguineous marriage and have high preference for continuing consanguineous marriage for their sons and daughters in future.

Limitations

This study found many limitations;

- Time duration was too short.
- This study was focus only on rural community.
- Likert scale questionnaire has been used in this study.
- Data collection was faced lot of issues.
- The respondents of the study have very careless attitude regarding filling questionnaire.

Participants of study have no idea about the importance of the filling questionnaire sincerely.

Conclusion

The current study investigates the knowledge of rural community towards health risk due to consanguineous marriages, attitude of rural community towards benefits regarding consanguineous marriages and practice of rural community regarding consanguineous marriages in the rural community Hussainabad, Lahore. The results are shown in 31 tables and 27 figure has been used to show results. The results of the study and discussion show that rural community has illiteracy regarding health risk for offspring due to consanguineous marriages, results shows that they are attracted to consanguineous marriages because it has many socio- economic and psychological benefits and these benefits are making cause to increase the interest of consanguineous marriages in future. The government should put strict laws for premarital tests to reduce the burden of congenital anomalies associated with consanguinity.

Current study was conduct to assess the knowledge, attitude and practice of rural community towards consanguineous marriages. Recommendations are following for study in future.

- This study should conduct in many other rural communities.
- It should be compare among urban and rural communities.
- Community education programs are needed to reduce the burden on health care systems,

The government should put strict laws for premarital tests.

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