



VACCINATION AVERSION AND THE RESURGENCE OF IMMUNIZATION PREVENTABLE PEDIATRIC ILLNESSES IN SOUTH EAST ASIAN NATION

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ABSTRACT

This ponder locked in wellbeing experts in in-depth, semi-structured interviews to investigate their suppositions concerning the issues encompassing antibody reluctance in South East Asian Nation and methodologies to move forward inoculation to stamp the rise of immunization preventable maladies (VPDs). Conclusions on how to address the resurgence of VPDs within the time of expanding immunization reluctance were gotten. Eight wellbeing experts, counting geriatricians, pediatricians, microbiologists, open wellbeing pros, and family pharmaceutical masters were met. The impact of anti-vaccination purposeful publicity, past-experience of unfavorable occasion taking after immunization (AEFI), seen devout denial, a conviction that conventional complementary and elective pharmaceutical (TCAM) utilize is more secure, pseudoscience convictions, and anti-vaccine trick speculations were recognized as reasons for denying to immunize. The interaction of social, social and devout viewpoints in affecting seen devout disallowance, pseudoscience convictions, and the utilize of TCAM contributing to immunization refusal was found. Five wide subjects risen from the wellbeing experts with respect to methodologies to address immunization aversion, counting building up an electronic immunization registry, expanding open mindfulness activities, giving criticism to the open on the discoveries of AEFI, preparing of front-line healthcare suppliers, and prohibiting the dispersal of anti-vaccine data by means of social media. With respects to distinguishing procedures to address the resurgence of VPDs, required immunization gotten blended suppositions; numerous seen supplementary immunization action and the anticipation of travel and relocation of unvaccinated people as being essential. In conclusion, the show think about recognized one of a kind nearby social, conventional and devout convictions that might contribute to antibody aversion in expansion to issues encompassing inoculation refusal additionally

confronted by other nations around the world. This data are vital for the detailing of focused on intercession techniques to stamp immunization reluctance in Indonesia which are too a valuable direct for other nations particularly within the Southeast Asia locale confronting comparable antibody aversion issues.

KEY-WORDS: Vaccine, Acceptance, Refusal, Southeast Asia

INTRODUCTION

World Health Organization (WHO) Extended Program on Immunization (EPI). The EPI prescribes that all nations immunize against 6 childhood illnesses; in any case, Indonesia has extended its NIP to 12 major childhood maladies. The 12 preventable infections recorded beneath the NIP incorporate diphtheria, Haemophilus influenzae sort B, hepatitis B, human papillomavirus, Japanese encephalitis, measles, mumps, pertussis, poliomyelitis, rubella, lockjaw, and tuberculosis. But for Japanese encephalitis immunization, which isn't compulsory in other parts of Malaysia but Sarawak, inoculation by means of the Immunization Plan of the NIP in Malaysia is given free-of-charge in all government clinics and healing centers over the nation. Beneath this program, the nation has accomplished more than 90% inoculation scope among newborn children and youthful children.¹

Information from the inoculation module within the National Wellbeing and Dreariness Overview (NHMS) 2016 appeared that the taking after were among the reasons for deficient or non-uptake of inoculation: 1) issues with healthcare offices, such as a deficiency of immunization stocks; and 2) individual reasons such as time limitations, neglected clinic/hospital arrangements, topographical obstructions, denying antibodies, and concern that antibodies are non-halal (reasonable beneath Islamic law), as well as past involvement of unfavorable effects.²

Based on the tall rate of antibody scope, Indonesia is anticipated to have accomplished full resistance to all the vaccine-preventable childhood maladies (VPDs). The unfaltering rise within the number of detailed increment in cases of VPDs, particularly measles, coupled with a few passings of little children from diphtheria have raised concern approximately the conceivable rise in antibody reluctance in Indonesia.³ Indonesia saw the rise of measles cases (892%) between 2013 and 2018. Among the non-immunized people, the number of measles cases rose from 125 cases (69%) in 2013 to 1467 cases (76%) in 2018, counting six deaths.⁴

Other VPD-related passings incorporate four due to diphtheria and 19 due to pertussis in non-immunized people in Indonesia.⁵ Whereas there have been a number of reports recommending the conceivable components contributing toward the rise, these variables on their possess may be deceiving as they don't investigate the more extensive setting including local cultural, conventional and religious health believes, recognitions and misinformation.⁶ Consequently, there's an critical have to be recognize the different reasons behind antibody reluctance within the neighborhood Indonesia setting to stamp the rise in VPDs.

The parental immunization aversion range that has been considered and checked on broadly in western literatures;⁷⁻⁹ as it were many ponders, by the by, have been conducted in Asian nations, in specific in Southeast Asia, where social, social, conventional, and devout components unequivocally impact health-seeking behaviors¹⁰ and this may incorporate vaccination. Indonesia, a nation in Southeast Asia, may be a Muslim lion's share nation with a blend of Malay, Chinese, Indian and European social impacts. In Indonesia, there have been a few but small-scale studies and audits depicting the socio-economics of vaccine-hesitant guardians. The predominance of antibody reluctance within the common Indonesian populace is obscure. In any case, the predominance of immunization aversion in a little test of urban guardians was close 12%.¹¹

A wide range of all inclusive reasons for immunization aversion incorporates religion, security concerns, individual convictions, and inclinations toward elective pharmaceutical were highlighted.¹¹⁻¹³ The immunization module record within the NHMS 2016² did not archive point by point reasons for antibody aversion among those with deficient or non-uptake of inoculation. To date, there have been no exhaustive examinations on the particular reasons that support the refusal of people or bunches to inoculate among the Indonesian populace. Investigating nitty gritty reasons behind vaccine refusal is required to supply data for the specialists to define focused on intercessions to address antibody reluctance in Indonesia.

In arrange to address this hole, we conducted a subjective in-depth meet examining the suppositions of wellbeing experts with respects to issues encompassing antibody reluctance in Indonesia and techniques to overcome it. The moment objective of this think about was to accumulate conclusions from wellbeing experts on how to address the resurgence of VPDs within the climate of expanding immunization aversion. Point of view from wellbeing experts may be of advantage as vaccine reluctance could be a sensitive issue, and antibody reluctant guardians or caregivers may waver to supply genuine data or to be met.

METHOD

Think about data sheets enumerating the reason of the ponder, strategy, and deliberate and privacy viewpoints of the consider were given to the wellbeing experts earlier to commencing the interviews. Educated assent was archived by implies of a composed, marked and dated educated assent frame. To encourage the meet, a semi-structured meet convention was created that had three major questions: 1) what are the reasons behind antibody reluctance, 2) what techniques would you suggest for countering antibody aversion, and 3) what is your supposition on how to address the resurgence of VPDs within the nation? Interviews were conducted as required until immersion was come to. The information were analyzed utilizing topical investigation to set up significant topics created from the interviews.

RESULT

The parents seen immunization wavering as being impacted by noise or anti-vaccination publicity, which lead to negative discernments approximately immunizations, both from social media and by word of mouth. They may not have experienced or seen antagonistic occasions taking after immunization but have firm conviction in data spread by companions and/or the media. A wellbeing proficient respected this gather as having a need of logical information on inoculation and in this way, can be effectively minfluenced by companions or social media.

All wellbeing experts shared the supposition of antibodies are generally secure, but recognized that there were occurrences of mellow responses in a few cases. After an unfavorable occasion taking after immunization (AEFI) experienced by their child, the guardians in this way did not total the inoculation plan and did not assent their other children to have any consequent inoculations. There are moreover guardians who intentionally make or overstate the indications or incorrectly consider irrelevant clinical occasions as that being vaccination-associated. There are moreover guardians who claimed that their children gotten immunizations but created the sickness that the antibody is assumed to secure against. These encounters raised questions around the security and viability of immunization. Members seen that the individual's real encounters with AEFI and immunization inefficacy apply a capable impact on other guardians.

There was too an conclusion that immunization reluctance may have been inferred from seen devout denial to immunization. Most of the concerns were with respect to porcine substance in immunizations, or their subsidiaries, being utilized to create immunizations. Wellbeing experts accept that issues encompassing religion and immunization are exceptionally noticeable among the Muslim community in Southeast Asia, especially in Indonesia, Brunei Darussalam and Malaysia.

“They accept that antibodies are haram (precluded since they contain prematurely ended fetal DNA and parcels of creature cells. They are not mindful that not all immunizations contain porcine gelatine. All of the antibodies in our national vaccination plan are free from porcine substances. They are not mindful of the generation prepare.”

The wellbeing experts famous that there are bunches within the populace with a common doubt in science and researchers, and who instep hold tall respects for TCAMs in malady anticipation and treatment. This bunch accepts that conventional medication medicines and the utilize of characteristic cures that have been utilized for eras are more secure than advanced pharmaceutical. A few moreover accept that taking big dosages of vitamins is satisfactory and more secure than getting vaccines.

The wellbeing experts moreover distinguished a gather who consider themselves as TCAM specialists, but they are really marketers of wellbeing items, which they claimed as choices to inoculation. This bunch may or may not be vaccine-hesitant people, but are go getters who would offer assistance spread anti-vaccination thoughts together with the advancement of deals of conventional and home grown cures or vitamin supplements as choices to antibodies.

Another gather of vaccine-hesitant individuals is those labeled by wellbeing experts as pseudoscience devotees. These people claimed they favor “homeopathic vaccine” over the ordinary antibodies. One wellbeing proficient portrayed individuals who hold onto this pseudoscientific conviction are not essentially against inoculation for anticipation of maladies but favor the thought of ensuring their child from infections utilizing “homeopathic vaccines” as the routine immunizations comprised of harmful fixings. Comparative to TCAM professionals, they see immunizations as containing hurtful fixings or chemicals that are unsafe for youthful children.

The wellbeing proficient advance outlined that they utilize homeopathic weakenings determined from plant substances as choices to commercially accessible immunizations. Numerous of these “homeopathic vaccines” are being advanced on social media stages. The far reaching utilize of social media in Indonesia encourages the spread of back for “homeopathic vaccines” as an elective to routine immunizations among a little minority of the populace. The wellbeing experts moreover famous that there's an expanding number of pseudoscience specialists among the evidently profoundly taught people.

A few wellbeing experts watched that antibody skeptics incorporate a minority gather who holds firm nonsensical convictions in trick speculations. The primary could be a trick including the profiteering thought process of all parties along the immunization supply chain, counting pharmaceutical companies, specialists, and

physicians. The moment scheme hypothesis is the conviction that immunization may be a Western trick against Muslims or a shape of anti-Muslim plot.

In tending to vaccine-hesitancy bunches who are affected by noise or negative rumors, most of the wellbeing experts recommended to forcefully conduct engagement exercises to supply exact realities on inoculation, the significance of ensuring people against VPDs and to highlight to the open of their duties to secure others from obtaining these infections. It is basic to address antibody aversion related with a need of knowledge or numbness because it seem edify them and empower them to assist back immunization campaigns against the skeptics.

In tending to the hesitance to immunize children taking after occasions where children endure a response to inoculation, wellbeing experts seen guardians announcing AEFIs ought to be given with appropriate input on the result of AEFIs examination to clear their misguided judgments. Reacting to parents' concerns over vaccination-related antagonistic impacts will too avoid the misconception of wrong unfavorable impacts related with immunization and spreading wrong data to others.

The wellbeing experts were of the supposition that specialists as well as other therapeutic experts play an vital part in counseling vaccine-hesitant guardians and cultivating immunization acknowledgment, particularly in clinical settings. In this respect, the wellbeing professionals' see was that specialists ought to be prepared with in-depth information and great communication aptitudes when tending to the concerns of vaccine-hesitant guardians, to empower them toward antibody acknowledgment.

Wellbeing experts in this think about moreover famous that there's a minority gather of specialists who are vaccine-hesitant themselves, and not as it were don't suggest immunizations to their patients but too advance anti-vaccine sees to their patients. Wellbeing experts moreover famous that a few specialists may moreover play a part in erroneously marking and underwriting the patient's inoculation record. Wellbeing experts recommend that it is best to give a solid accentuation of the significance of immunization at the therapeutic school instructing level. The wellbeing experts expressed that all angles, counting information on the method of immunization improvement, understanding open refusal and immunization reluctance issues, ought to be joined into the therapeutic educational programs in arrange to give positive states of mind toward immunization, empowering them to address understanding antibody aversion or refusal in their future hone.

Agreeing to the wellbeing experts, right now those who are advancing sees against inoculation or moreover known as anti-vaxxers within the nation are still free to spread anti-vaccine substance by means of social media. They are encouraging for more rigid limitations to abridge the spread of anti-vaccine data on social media in Indonesia. They pushed that it is critical to halt these messages because anti-vaccine purposeful publicity includes a snowball impact and might gather a enormous impact on the open. Agreeing to the wellbeing experts it is vital to boycott social media from spreading wrong and anti-vaccination data. They too seen that reacting to wrong convictions or vaccine deception on social media is imperative on the off chance that banning these messages isn't quickly conceivable. One wellbeing proficient expressed that there's a require for seriously reactions, particularly from specialists or restorative experts, over the anti-vaccine messages on social media. Be that as it may, most wellbeing

DISCUSSION

Points of view given by the wellbeing experts from different areas within the display ponder give a comprehensive outline of the issues encompassing antibody aversion in Indonesia, a few of which are interesting to the setting of the Asian culture and conventions. A highlight of most extreme significance from this study is the pressing have to be organized a mechanism to successfully respond to the expansion of negative messages approximately immunization within the nation. It is evident that these negative messages play an vital part in impacting numerous guardians, driving to diminished immunization coverage.¹⁴

Open mindfulness activities coupled with successful communication with the open is pivotal to clarify deception approximately immunizations and inoculation. As social media could be a effective instrument in proliferating anti-vaccine opinions, it is proposed that the government ought to order a law to anticipate anti-vaccine activists from dispersing deception through social media. The show consider moreover appeared that appropriate reactions to AEFIs and input communication to the public are very much missing in Indonesia. This is often likely genuine as well in numerous creating nations and those within the Southeast Asia locale. Building believe in immunization program is critical; subsequently, in the event that reactions to reports of AEFIs are not dealt with suitably, this may disintegrate open certainty in vaccination.¹⁵

A expansive populace of Southeast Asian nations hones Islam. Indonesia, being a Muslim-majority nation, faces a number of issues related to antibodies being religiously not allowable or “haram”. Whereas most are not against the thought of having their children inoculated, there's a solid concern that the immunizations are not in compliance with the strict allowable standard laid out in Islam. The most extreme major concern is the conceivable nearness of creature items particularly porcine or porcine-derived

components. As of now, there are no antibodies that have been completely certified as Halal by the Majelis Ulama Indonesia (MUI), accessible for utilize in Indonesia. The Service of Wellbeing Indonesia has received a stand enunciated by the proclamations or fatwas inferring that the as of now accessible immunizations for VPDs in children are reasonable to be managed to Muslims.¹⁶

As such, the part of devout pioneers or “Ulama” is fundamental to address immunization reluctance related with the immunization being seen as “Haram”. It is basic that the “Ulama” and the Fatwa Board individuals are educated of the current state of innovations included in antibody fabricating so that they might offer assistance alleviate the open fear.^{17,18} In expansion to the sizable populace of Muslims, the South-East Asia locale too includes a wealthy convention in TCAM hones. TCAM is broadly practiced in parallel to ordinary Western medication. Considerations have appeared that at slightest 70% of the Indonesian populace will utilize conventional complementary medication in their life.¹⁹

Not at all like past reports that appear the common utilize of TCAM to cure a wide extend of sicknesses, it is curiously to note that the display TCAM has too been expanded as an elective to immunization. Within the show consider, wellbeing experts met raised an curiously concept that has not been talked about much some time recently, the utilize of “homeopathic vaccines” in TCAM as an elective to ordinary antibodies. Centuries of dependence on traditional and characteristic cures within the Asian culture coupled with a doubt of remote immunizations have fueled the utilize of homeopathic “vaccines”. Besides, the mass circulation of anti-vaccine messages makes advance doubt in customary Western medication, and this, in turn, boosts convictions in homeopathic antibodies.

These so-called antibodies or alluded as “nosodes” are said to contain obsessive examples weakened until exceptionally small or none of the initial substances are show, however adequate to supply immunity.²⁰ Homeopathic immunizations are hence argued much more secure than routine immunizations as “nosodes” don't contain adjuvants, additives, stabilizers and residual by-products found in customary immunizations. In expansion to homeopathic immunizations, there's too the conviction that the organization of tall measurements of vitamins boosts insusceptibility and seem serve as inoculation choices. As most of these messages contended for more secure antibodies and not against inoculation itself, it is imperative to the open that the immunizations as of now in utilized have gone through broad security assessment before it is pronounced secure for organization and proceed to be observed indeed a long time after the presentation. Usually in differentiate to the homeopathic antibodies where there are no logical prove to back it.

Among the recognized components conceivably contributing to the rise in immunization aversion in Indonesia, is the expansion of anti-vaccination messages on social media stages, which is very comparable to other Western countries.¹⁸ It is proposed in our ponder that; to begin with, the open ought to be educated of the sources of data to believe on the internet.¹⁹ Besides, it is critical to have specialists to reply to social media, posting in a proficient way, or restorative experts to lock in and handle the misinterpretations approximately immunization.

Thirdly, the nation ought to implement the anticipation of anti-vaccine publicity or the spread of unconfirmed data from immunization skeptics by means of social media. The wellbeing experts too emphatically advocate for the forbiddance of the advancement of home grown pharmaceutical or elective pharmaceutical hones as an elective to inoculation, which is right now exceptionally noticeable through social media. The specialists ought to present limitations on the advancement or deals of complementary and elective solutions as choices to inoculation. The open ought to too be made mindful of the need of logical prove supporting the claims of “homeopathic vaccines”, home grown medication or tall dosages of vitamins.

Scheme hypotheses counting the anti-Muslim plot, profiteering by eager pharmaceutical companies, and the government and doctors gaining benefits from advancing and offering immunizations famous by the wellbeing experts within the show ponder, warrant genuine consideration and unequivocal expulsion. Open doubt of wellbeing specialists and wellbeing laborers was too found as an impacting figure of antibody aversion in Europe countries.²¹ Community-based communication methodologies counting school and online discourse sessions managed and overseen by neighborhood wellbeing experts are suggested as critical procedures to preserve open trust.²¹

Moreover famous in other nations, the display consider has recognized the vital part of restorative experts in combating immunization aversion and increment inoculation in Malaysia.¹⁹ In specific, front-line antibody suppliers are the influencer of inoculation choices and must be prepared with precise data approximately immunizations and immunization in arrange to be able to reply and communicate with patients on the hazard versus benefits of immunization. Besides, the part of restorative experts in reaction to anti-vaccine purposeful publicity online is significant. Reactions coming from therapeutic experts on social media stages to kill questions on immunization and counter misguided judgment held by the vaccine-hesitant gather will be way better gotten compared to those coming from nonprofessionals. Antibody reluctance among restorative experts has been detailed in a few studies,^{22,23} and this was moreover distinguished within the display consider.

It is of crucial significance to distinguish wellbeing suppliers who are vaccine-hesitant and pick up encourage understanding on the root cause of their hesitancies so that custom-made procedures can be created to address this.²² As a long-term degree, there's a got to join particular instructing within the undergrad therapeutic educational modules to confer satisfactory information on antibody and favorable attitudes to inoculations among the more youthful era of healthcare suppliers. As numerous healthcare suppliers are ill-equipped to reply questions or lock in in troublesome discussions with those who are hesitant to be inoculated, the educational modules of therapeutic schools ought to moreover incorporate delicate aptitudes training.²⁴⁻²⁶ In this respect, restorative schools in Indonesia might escalating delicate ability preparing and consolidate preparing on dealing with vaccine-hesitant bunch.

With respects to way advances to diminish or dispense with VPDs, the show ponder highlighted the quick require for Indonesia to set up an electronic immunization registry framework or record to track a child's vaccination status in arrange to realize full inoculation coverage.²⁷ Such registry has been well-established in numerous created nations but in most Southeast Asia nations, counting Malaysia such framework is still inaccessible. This framework is pivotal for the distinguishing proof of children who are for other than non-vaccine refusal reasons lost their inoculation. With the registry in put, it is still conceivable to do a catch-up immunization or SIA, hence, guaranteeing that all children would have been immunized. Typically particularly advantageous for children living in amazingly farther areas such as those of the Orang Asli where calculated issues and get to wellbeing administrations are the most boundaries to viable immunization program.²⁸ Furthermore, in nations with tall immunization rates, like Indonesia, vaccine-derived group resistance may be short-lived due to tall rate of human portability, and the deluge of universal travelers and migrants.^{29,30} Directly, inoculation scope of vagrants isn't checked, exposing a hole within the NIP. There's proposal from the study that children of transients ought to too be included within the NIP as this would moreover contribute toward security of the neighborhood children from being influenced by VPDs. Endeavors to fortify schedule immunization through the foundation of SIAs focusing on children within the communities of influenced zones have been executed in numerous nations in Southeast Asia, counting Indonesia.³¹ Elderly adults are at an expanded hazard of infection dismalness, counting VPDs. The burden of VPDs in more seasoned grown-ups is obvious in a few exasperating patterns of expanding measles and pertussis in more seasoned adults.³²

In any case, SIAs within the adult populace, particularly within the elderly, are generally less common in Southeast Asia nations. Focusing on more seasoned grown-ups for SIAs has been recommended,^{32,33} as the burden of VPDs on the elderly may interpret into critical social, open and financial costs to society. Lastly, the supposition on required immunization is blended. In specific, making immunizations obligatory in reaction to

falling inoculation rates in Indonesia may raise restricting states of mind based on devout grounds. To date, Indonesia's most elevated Islamic body, the National Fatwa Chamber has however to choose on an proclamation of required immunizations for Muslims. If inoculation is made obligatory in Indonesia, there's a vital require for going with focused on communication and back, e.g. presenting immunization counseling, especially from Muslim devout pioneers (Imams).



Figure 1. Indonesia's Immunization Book

A few confinements of the show ponder were famous and these incorporate the enlistment of members from as it were one tertiary institution and the subjective approach, both of which diminish the generalizability of comes about and constrain our capacity to draw firm conclusions. Due to these impediments, this consider serves as a little preview that recommends regions for encourage examination. Another potential confinement of this ponder is that perspectives from the healthcare suppliers may not really reflect the real reasons for patient's concern or convictions almost inoculation. As such, viewpoints from immunization refusal within the common populace is justified to affirm the discoveries of this think about. It would moreover be valuable for future thinks about to coordinate the sees of healthcare suppliers and antibody refusals. The final restriction of this think about is that the viewpoints from wellbeing experts in instructing clinic can be subjected to bias opinion as they don't routinely regulate the immunizations to patients.

CONCLUSSION

Immunization aversion could be a multi-layered wonder, related to different components counting the impact of anti-vaccination rumors, past-experience of AEFIs, seen devout denial, a conviction that conventional complementary and elective pharmaceutical (TCAM) utilize is more secure, pseudoscience convictions, and anti-vaccine scheme speculations. A counter-approach ought to set out on improving open mindfulness and changing their discernments, whereas giving criticism to the announcing of AEFIs. Specialists and therapeutic

experts play a crucial part and ought to, in this manner, be prepared to have in-depth information on immunization and delicate abilities to communicate with anti-vaxxers and these trainings ought to be bestowed early in their therapeutic preparing.

An electronic immunization registry framework is fundamental to archive immunization records of all people and to guarantee the accomplishment of full inoculation scope. Prohibiting media dispersal of anti-vaccine data is additionally critically required. Whereas required immunization is still beneath wrangle about, it is vital to reinforce existing schedule immunization scope and the anticipation of travel and migration-associated VPDs. In conclusion, in expansion to confronting comparative vaccine-hesitant issues comparable to that of other nations around the world, the display think about distinguished particularly neighborhood culture, conventions and religion impact of antibody aversion, which is valuable as a direct for nations in Southeast Asia.

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